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SUMMARY OF SITE ASSESSMENTS, SOIL GAS SURVEY, HUMAN HEALTH SCREENING EVALUATION, AND WORK PLAN

11630-11700 Burke Street
Santa Fe Springs, CA 90670
(RWQCB SCP Case No. 1238)

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Submitted to:
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1.0 INTRODUCTION

This report summarizes the results of prior soil and ground water assessments and soil remediation efforts completed to date for the real property identified as 11630 - 11700 Burke Street, Santa Fe Springs, Los Angeles County, California 90670 (Site) (see Figure 1), documents the results of a soil gas survey and human health screening evaluation completed in the First Quarter 2009, and includes recommendations for additional actions at the Site. EAI was retained by Mr. Larry Patsouras, the current property owner, to prepare this report.

Assessment efforts associated with the Site are currently being overseen by the California Regional Water Quality Control Board, Los Angeles Region (RWQCB). Mrs. Ann Lin is the RWQCB Case Manager assigned to the Site and the Site Cleanup Program Case Number is 1238.

1.1 BACKGROUND INFORMATION

The Site, approximately 8.5 acres, is identified by the County of Los Angeles as Assessor's Parcel Number 8168-001-008. For reporting purposes the Site has been divided into the "East Parcel" where Mr. Patsouras operates El Greco, a wholesale grocery warehouse, and the "West Parcel" where Talco Plastics formerly operated until 1997 (see Figure 2). All of the former Talco Plastics facilities, except an office building, were removed from the West Parcel of the Site pursuant to permits issued by the City of Santa Fe Springs.

Historically, the Site Mitigation Unit (SMU), Health Hazardous Materials Division, County of Los Angeles Fire Department was initially working on environmental issues associated with the Site. On June 4, 1997, the SMU forwarded a letter to Mr. Jim Ross of the RWQCB transferring the case to the RWQCB due to the presence of chemicals, e.g., tetrachloroethene (PCE) and trichloroethene (TCE) detected in ground water beneath the Site.

1.1.1 Historical Land Use

Globe International, Inc. (Globe), a manufacturer of oil well drilling equipment and tools, occupied the Site beginning in or about 1968. Prior to that time the Site was reportedly undeveloped (see AIG, 1994). Palley Supply Company (Palley), a government surplus order house, occupied the Site beginning in 1973. Max Rouse & Sons, Inc., industrial auctioneers, occupied the East Parcel beginning in 1981, followed by Master Box and Paper Company beginning in 1987, and El Greco in 1997. Talco Plastics occupied the West Parcel between about 1983 and 1997. Talco Plastics was in the business of reprocessing plastic resins, i.e., plastic scrap purchased from various sources was ground and further palletized by extrusion.

In 1970, Globe received a Notice of Violation (NOV) from the Los Angeles County Engineer for discharging of liquid waste to the ground surface. An analysis of the waste discharged indicated high levels of dissolved solids. The waste was the result of steam cleaning and degreasing

operations of steel parts prior to painting. Oil and grease in the wastewater were not analyzed at that time. Subsequently, Globe installed a waste disposal system in which liquid waste flowed out into the sewer after passing through two three-compartment interceptors/clarifiers. Solid sedimentary waste products consisting of chemicals, grease, sand and steel scales estimated at 15-20 cubic feet per month was reportedly pumped from the interceptors/clarifiers and disposed of by private vendors.

In 1978, Palley received a NOV from the City of Santa Fe Springs for discharge of industrial wastewater to the public sewer system. Palley, who was engaged in hydraulic equipment maintenance, was discharging industrial waste from a steam cleaning operation through one or both of the interceptors/clarifiers described above, to the sanitary sewer.

In 1987, the County of Los Angeles Department of Health Services requested a criminal complaint to be filed by the District Attorney's office against Palley. The complaint was associated with the presence of the two subsurface structures (interceptors/clarifiers) consisting of three compartments and each compartment containing a black oily liquid resembling waste oil. Palley ceased these operations in 1987.

In 1988, following overflow of the abandoned clarifiers onto the east parcel of the Site during a rain storm, the City of Santa Fe Springs Fire Department directed Mr. Palley, the property owner at that time, to properly dispose of the waste contained in the two clarifiers and the approximately twenty 55-gallon drums also containing waste located directly adjacent to the clarifiers. Records indicated that 3,500 gallons of waste liquid were removed from the Site on November 15, 1988. The clarifiers were reportedly subsequently abandoned by filling them with sand and concrete.

2.0 SUMMARY OF PRIOR INVESTIGATIONS

2.1 PHASE I SITE ASSESSMENT

In June 1994 AIG Consultants, Inc. (AIG) completed a Phase I Environmental Site Assessment of the Site (see AIG, 1994). The Site at that time was owned by Mr. William Palley and the West Parcel was occupied by Talco Plastics and the East Parcel contained a warehouse that was vacant (see Figure 2). The purpose of the assessment was to identify any known or potential environmental problems at the Site. Based upon their investigation, AIG concluded that there was evidence of past activity at the Site which may represent environmental risks and/or liabilities, and therefore, AIG recommended that a Phase II investigation be performed to determine the presence or absence of contamination.

2.2 PHASE II SITE ASSESSMENT

In August 1994, Professional Service Industries, Inc. (PSII) completed a Phase II investigation of the Site (see PSII, 1994). Based on review of the AIG Phase I report and a walk-through and inspection of the property, PSII drilled and sampled eight borings (B-1 through B-8) ranging in depth from 4.5 to 35 feet below ground surface (bgs), and four hand auger borings (HA-1 through HA-4) on the Site. These soil sampling locations targeted the following areas of the Site (see Figure 3):

LOCATION	BORING
East Parcel	
- Storage Shed	HA-1
- Abandoned Clarifiers	B-6, B-7
- Historical Stained Areas	B-1, B-2, B-3, B-4, B-8
West Parcel	
- Clarifiers (Historical Paint/Steam Cleaning Area)	HA-2, HA-3
- Maintenance Shop (Clarifier)	B-5
- Equipment Storage (Stained Area)	HA-4

Soil samples were selectively analyzed for total petroleum hydrocarbons (TPH) by modified EPA Method 8015, volatile organic compounds (VOCs) by EPA Method 8260, and Title 22 metals by EPA Methods 6010/7471. The results of the hydrocarbon testing are summarized on Table 1 and metal testing on Table 2.

For comparison purposes, Table 1 and Table 2 include Soil Screening Levels (SSLs) based on use of RWQCB attenuation factor guidance (see RWQCB, 1996A and 1996B), California Human Health Screening Levels (CHHSLs) for residential land use and commercial/industrial land use (see Cal-EPA, 2005), and EPA Region 9 Screening Levels for Chemical Contaminants (SLCCs) at Superfund Sites for residential land use and commercial/industrial land use (see EPA, 2008).

2.3 SUPPLEMENTAL SITE ASSESSMENTS

Supplemental assessments of the Site were completed by EAI in 1994 (see EAI, 1995), 1996 (see EAI, 1997) and 1999 (see EAI, 1999). These investigations included:

- **1994:** Drilling and sampling of borings E-1 through E-17, and installation of ground water monitoring well MW-1. Borings E-1 through E-17 ranged in depth from 10 to 45 feet bgs. Note four attempts were made to advance boring E-13; however, auger refusal was encountered at each location. Ground water was encountered beneath the Site at a depth of about 36 feet bgs, and therefore, well MW-1 was terminated at a depth of 53 feet bgs and slotted between 33 and 53 feet bgs.

- **1996:** Near surface soil sampling locations SS-1, SS-2, SS-3, SS-4 and SS-5, and installation of ground water monitoring well MW-2.

- **1999:** Drilling and sampling of borings S-1 through S-10 (each 10 foot deep) and sample location Pit.

These media sampling locations targeted the following areas of the Site (see Figure 3):

LOCATION	BORING
East Parcel	
- Storage Shed	E-8, E-9, E-11
- Abandoned Clarifiers	E-7, E-14, E-15
- Historical Stained Areas	E-10, E-12, SS-1, SS-2, SS-3, SS-4
West Parcel	
- Underground Storage Tanks	E-1, E-2, E-3, E-4
- Clarifiers (Historical Paint/Steam Cleaning Area)	E-5, E-6, S-3, S-4, S-5, S-6, S-7, S-8, Pit
- Mechanical Pit	E-16
- Maintenance Shop (Clarifier)	E-17, S-1, S-2
- Removed Storm Water Clarifier	S-9, S-10

Selected soil samples were analyzed for TPH as gasoline (TPH-G), as diesel (TPH-D) and as oil (TPH-O) by modified EPA Method 8015M, total recoverable petroleum hydrocarbons (TRPH) by EPA Method 418.1, VOCs by EPA Methods 8020, 8240 and 8260, Title 22 metals, semi-volatile organic compounds (SVOCs) by EPA Method 8270C, and polychlorinated biphenyls (PCBs) by EPA Method 8082. See Table 1 and Table 2 for soil testing results.

Ground water well MW-1 was located in the central area of the Site near the former storage shed and clarifiers, and MW-2 in the northeastern area of the Site (see Figure 3). Based on ground

water elevation data for two adjacent properties with known soil and ground water contamination (see Section 4.0) the ground water flow for the area is westerly-southwesterly.

Ground water samples were collected and analyzed for VOCs and Title 22 Metals. Table 3 summarizes the ground water quality data for VOCs and Table 4 for metals.

2.4 REMOVAL OF UNDERGROUND STORAGE TANKS

In April 1998, two USTs (one diesel and one gasoline) were removed from the Site by Advanced GeoEnvironmental, Inc. (AGI) pursuant to a permit issued by the SFSFD. The dispenser (fuel) island and product piping were located directly over the two USTs. Five soil samples were collected from beneath the USTs following removal, i.e., two (B1A and B1B) from beneath the gasoline UST and three (B2A, B2B and B2C) from beneath the diesel UST (see Figure 3). Two samples (SP1 and SP2) of the soil excavated during USTs removal activities were also collected for analysis.

The soil samples collected from beneath the gasoline UST were analyzed for TPH-G, BTEX and MTBE, the samples beneath the diesel UST for TPH-G, TPH-D, BTEX and MTBE, and the stockpiled soil for TPH-G, TPH-D, TRPH, BTEX and MTBE (see AGI, 1998). No chemicals were detected in five soil samples collected from beneath the USTs (see Table 1). TRPH at a maximum concentration of 20 mg/kg was the only chemical detected in the stockpiled soil.

Based on review of AGI, 1998 the SFSFD issued a no further action (NFA) letter for the USTs dated May 1, 1998.

It should be noted that Amnat Environmental & Geotechnical (AEG) completed a Leak Detection Investigation of the USTs in 1995 for the Los Angeles County Department of Public Works. The investigation included the drilling and sampling of six borings, i.e., boring B-1 and B-3 to 40 feet bgs, B-5 and B-6 to 20 feet bgs, and B-2 and B-4 to 5 feet bgs (see AEG, 1995). Fourteen soil samples were analyzed for TPH-G, TPH-D and BTEX. No chemicals were detected in the soil samples analyzed. Note these data are not included on Figure 3 or Table 1.

2.5 REMOVAL OF STORM WATER CLARIFIER

Pursuant to closure authorization issued by the SFSFD on January 7, 1999, the storm water clarifier located west of the office building situated on the West Parcel of the Site was removed. On August 25, 1999, the SFSFD issued a closure certification for the storm water clarifier.

It should be noted that EAI borings S-9 and S-10 were drilled and sampled in February 1999 to assess potential impacts associated with the storm water clarifier (see Figure 3). Soil samples collected from each boring at 10 feet bgs were analyzed for TRPH and VOCs, and no chemicals were detected (see Table 1).

2.6 SOIL REMEDIATION – 2006

In 2006, Biophysics Environmental Assessment, Inc. (BEA) was retained by Mr. Patsouras to excavated impacted soil for two areas on the East Parcel of the Site, i.e., storage shed (EAI Borings E-9 and HA-1) and abandoned clarifier area (EAI Boring B-7). These two areas of the East Parcel were targeted for excavation since prior investigations indicated the presence of hydrocarbons in soil above SSLs (see Table 1).

BEA submitted to the SFSFD a Soil Remediation Work Plan (see BEA, 2006A) and Addendum to Soil Remediation Work Plan (see BEA, 2006B) outlining the soil excavation efforts proposed for the Site. On August 9, 2006 the SFSFD issued a letter approving the Soil Remediation Work Plan as amended.

Between August 16 and 18, 2006, BEA excavated two trenches to approximately 20 feet bgs in areas of the storage shed and abandoned clarifier (see Figure 4). A total of 25 soil samples were collected as part of the excavation efforts, i.e., 12 from the storage shed trench and 13 from the abandoned clarifier area trench. Each soil sample was analyzed for TPH-G, TPH-D, TPH-O and VOCs, including fuel oxygenates, and six soil samples were also analyzed for Title 22 metals (see Table 5).

TPH-G was not detected in any of the 25 soil samples analyzed. TPH-D was detected in four of the 25 soil samples at concentrations ranging between 5.2 mg/kg and 146 mg/kg, and TPH-O in two samples at concentrations of 30J mg/kg (this is an estimated concentration above the method detection limit, but below the laboratory reporting limit) and 180 mg/kg. All of the TPH-D and TPH-O concentrations detected are below their respective SSLs.

Toluene and xylenes were the only VOCs detected in the 25 soil samples analyzed, and both chemicals were detected in only one soil sample, i.e., E9Center@10'. The toluene and xylenes concentrations detected are below their respective SSLs.

Several Title 22 metals were detected in the six soil samples analyzed, i.e., arsenic, barium, chromium, cobalt, copper, lead, molybdenum, nickel, vanadium, and zinc. No metals were detected above environmental screening levels established for residential and commercial/industrial land use, except arsenic. Arsenic was detected in all six samples at concentrations ranging between 3.6 mg/kg and 5.8 mg/kg.

On October 6, 2006 the SFSFD issued a letter providing comments on the BEA Soil Remediation Report of Findings (see BEA, 2006C). This letter indicates that no further action will be required by the SFSFD for the two areas excavated by BEA in August 2006. However, the letter identified other non-UST regulated subsurface units that require closure by the SFSFD, before redevelopment can be considered. The closure of these subsurface units is addressed in Section 2.7.

It should be noted that the BEA Soil Remediation Report of Findings does not include any figures depicting the locations of the various soil samples collected by BEA as part of their investigation. Only one figure depicting the excavation areas is included in the BEA report.

2.7 CLOSURE OF SUBSURFACE UNITS – 2009

In February 2009, the five non-UST regulated subsurface units associated with the SFSFD letter dated October 6, 2006 (see Section 2.6) were addressed by EAI pursuant to permits issued by the City of Santa Fe Springs (see EAI, 2009B). The units were identified as (see Figure 5):

Subsurface Unit No.	Identification
1	Abandoned water line
2	Concrete electrical utility box
3	Clarifier
4	Clarifier
5	Clarifier

Media samples were analyzed for TPH-G, TPH-D, VOCs, SVOCs, Title 22 metals, and PCBs. Table 6 summarizes the results of the analytical testing and media sampling locations are depicted on Figure 5. See EAI, 2009B for details on closure activities.

2.8 GROUND WATER SAMPLING - 2009

2.8.1 Well Redevelopment

On January 28, 2009 EAI staff visited the Site to redevelop wells MW-1 and MW-2 since the wells were last sampled in January 1997. Well MW-1 was dry and the interface probe hit bottom at about 52 feet bgs, indicating about one foot of sludge in the bottom of the well (see Table 7).

Water was encountered at a depth of 39.62 feet in well MW-2, and the interface probe bottomed out at about 53 feet. Well MW-2 was purged and surged until dry, and after about one-hour water had recharged to about 40 feet. Well MW-2 was purged and surged dry a second time and the bottom of the well regauged at 55 feet.

2.8.2 Well Sampling

On February 19, 2009 EAI staff visited the Site to sample the wells. Well MW-1 was dry. Prior to initiating any purging or sampling activities for well MW-2, depth measurements to fluid levels were obtained using an interface probe accurate to 0.01 foot (see Table 3). Ground water was measured in well MW-2 at a depth of 39.70 feet.

Prior to collecting a ground water samples for analytical testing, well MW-2 was purged. Temperature, conductivity, turbidity and pH readings were recorded (see Appendix A). The

ground water was collected from just below the water surface using a disposable bottom bailer equipped with VOC sampling tips. The sample was sealed in 40-milliliter volatile organic analysis (VOA) vials with Teflon septa lined lids. Each vial was completely filled so that no headspace existed between the sample and the lid.

The ground water sample was analyzed for TPH-G, TPH-D, TPH-O, VOCs including fuel oxygenates and ethanol, total chromium, and hexavalent chromium (see Table 3 and Table 4). PCE at a concentration of 7.19 ug/L and hexavalent chromium at a concentration of 0.0039 ug/L were the only chemicals detected in the ground water. Appendix B contains the chain of custody record and laboratory report.

Ground water quality data are presently insufficient to determine the extent of VOC impact associated with the Site, and therefore, additional wells are being proposed (see Section 6.1). However, presently available data for the Site indicate only very low concentrations of selected VOCs in soil, i.e., PCE concentrations less than 0.52 mg/kg, which suggest that minimal ground water impacts are likely from on-site activities.

3.0 SOIL GAS SURVEY

3.1 RATIONALE FOR SOIL GAS SAMPLING STRATEGY

The soil gas sampling strategy was developed to address the presence or absence of VOCs beneath the West Parcel of the Site at depths of 5 and 15 feet bgs. As outlined in the EAI Work Plan (see EAI, 2008) and EAI Work Plan Addendum (see EAI, 2009A), the West Parcel of the Site was divided into 100' by 100' grid segments and soil gas samples collected and analyzed from the approximate center of each grid segment (see Figure 6).

Soil gas sampling and analysis were conducted in accordance with the guidelines contained in the RWQCB and Department of Toxic Substances Control (DTSC) document titled "*Advisory - Active Soil Gas Investigations*," dated January 28, 2003, supplemented by the DTSC document titled "*Interim Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air*," dated December 15, 2004, revised February 7, 2005. Soil gas samples were analyzed on-site by a mobile laboratory operated by H&P Mobile GeoChemistry (H&P) for VOCs by EPA Method 8260B, and two confirmation samples collected in Summa Canisters were analyzed by H&P at its fixed-base laboratory for VOCs by EPA Method TO-15.

3.2 SOIL GAS SAMPLING METHODS AND PROCEDURES

Soil gas sampling activities were completed on February 23 and 24, 2009 by H&P under the supervision of EAI staff. The weather was overcast, but no rain. Soil gas samples were collected from 25 soil gas probe locations identified as A4 through E5 (see Figure 6). All soil gas probes were installed on February 23, 2009, and soil gas samples collected from the probes on February 23 and 24, 2009 for analytical testing.

A general description of the soil gas sampling collection procedures is provided below. Appendix C contains H&P's detailed field sampling procedures. All probes were installed using a Strataprobe rig. Once the probe was driven to the desired sampling depth, the hollow probe drive-rods were withdrawn. A small diameter inert nylaflow tubing and filter were then inserted in the borehole to the desired depth. An on-off valve was placed on the tip of the tubing at the ground surface. Clean graded No. 3 kiln dried sand was poured around the tubing and filter to allow for diffusion of soil gas vapors. On top of this sand was emplaced hydrated bentonite to approximately 5 feet bgs and a second probe (consisting of a separate dedicated nylaflow tubing) was installed in the same borehole (i.e., a multi-depth nested vapor probe). One foot of clean sand was placed in the borehole followed by hydrated bentonite to the ground surface.

The probes were allowed to equilibrate for at least 30 minutes, prior to collecting soil gas samples for analytical testing. Soil gas samples for on-site analysis were collected from the inert tubing using a 60 cubic centimeter syringe connected via the on-off valve located at the surface tip of each probe. Each probe was then purged based on a pre-determined purge volume established by the purge volume test (see Section 3.2.1). A sample of the in-situ soil gas was

then withdrawn and immediately transferred to the on-site H&P mobile laboratory for VOCs testing.

Confirmation soil gas samples were also collected from sample locations E3@5' and D6@15' using Summa Canisters. The Summa Canisters contained a choke that filled the canister at a rate of about 150 milliliters per minute. The Summa Canister samples were analyzed off-site for VOCs.

3.2.1 Purge Volume Test

A purge volume test was conducted at the beginning of the soil gas survey to purge ambient air from the sampling system to ascertain the purge volume with the highest concentration. Gas from sample location E1@5' was purged of one, three and seven volumes and each sample was analyzed on-site for VOCs. The highest concentration of VOCs was detected in the three purge volume sample (see Table 8), and therefore, three purge volumes were used for all remaining soil gas samples.

3.2.2 Use of Tracer Compound to Ensure Probe Seal Integrity

A tracer compound, 1,1-difluoroethane, was used to test for leaks around the probe at the ground surface and in the sampling system. The tracer was placed around the base of the probe barrel and at the top of the probe barrel during sample collection. Each soil gas sample was analyzed for 1,1-difluoroethane, the presence of which confirms a leak. No 1,1-difluoroethane was detected (see Appendix B).

3.2.3 Sample Containers

H&P provided the syringes and Summa Canisters used to collect the soil gas samples.

3.3 ANALYTICAL PROGRAM AND RESULTS

Soil gas samples were analyzed by H&P using mobile and its fixed-base laboratory. Fifty seven soil gas samples were collected for analysis, i.e., 52 field samples, three duplicate samples, and two confirmation samples in Summa Canisters. Twenty nine soil gas samples were collected from 5 feet bgs, and 28 soil gas samples from 15 feet bgs.

The field and duplicate samples were analyzed on-site for VOCs by EPA Method 8260B and the Summa Canister samples for VOCs by EPA Method TO-15. The results of the on-site testing are summarized in Table 8 and the Summa Canister results in Table 9. Appendix B contains the chain of custody records and laboratory reports.

The following chemicals were detected in soil gas beneath the Site:

- Propene
- Trichlorofluoromethane (TCFM)
- Acetone
- 1,1-Dichloroethene (1,1-DCE)
- Carbon Disulfide
- 1,1-Dichloroethane (1,1-DCA)
- 2-Butanone (MEK)
- Chloroform
- Benzene
- Carbon Tetrachloride
- Trichloroethene (TCE)
- Toluene
- Tetrachloroethene (PCE)
- Chlorobenzene
- Ethylbenzene
- Xylenes
- 1,2,4-Trimethylbenzene (1,2,4-TMB)
- 1,3,5-Trimethylbenzene (1,3,5-TMB)

Listed below are the frequency of detection and the maximum concentration of each chemical detected at 5 and 15 feet bgs (see Table 8 and Table 9, respectively).

	Maximum Concentration 5 feet bgs (ug/L)	**Detection Frequency 5 feet bgs**		**Maximum Concentration 15 feet bgs (ug/L)**	**Detection Frequency 15 feet bgs**	
Propene	0.23	1/1*	100%	0.021	1/1*	100%
Trichlorofluoromethane	<0.005	0/29	0%	0.011	1/28	3.5%
Acetone	0.32	1/1*	100%	0.55	1/1*	100%
1,1-DCE	<0.005	0/29	(0%	0.0059	1/28	3.5%
Carbon Disulfide	0.036	1/1*	100%	0.001	1/1*	100%
1,1-DCA	<0.005	0/29	0%	0.0058	1/28	3.5%
MEK	0.23	1/1*	100%	0.0091	1/1*	100%
Chloroform	<0.005	0/29	0%	0.15	3/28	11%
Benzene	0.26	9/29	31%	0.16	10/28	36%
Carbon Tetrachloride	<0.005	0/29	0%	0.17	4/28	14%
TCE	0.016	1/29	3%	3.7	21/28	75%
Toluene	0.057	1/29	3%	1.0	2/28	7%
PCE	0.47	16/29	55%	17	28/28	100%
Chlorobenzene	0.009	1/1*	100%	<0.005	0/1*	0%
Ethylbenzene	0.015	1/29	3%	0.65	2/28	7%
Xylenes	0.077	1/29	3%	3.22	2/28	7%
1,2,4-TMB	0.017	1/1*	100%	0.0094	1/1*	100%
1,3,5-TMB	0.0058	1/1*	100%	<0.005	0/1*	0%

* = Chemical included only for samples analyzed by EPA Method TO-15.

Propene, acetone, carbon disulfide, MEK, chlorobenzene, 1,2,4-TMB and 1,3,5-TMB are not included in the list of target chemicals associated with EPA Method 8260B and are only associated with the two confirmation soil gas samples collected in Summa Canisters and analyzed by EPA Method TO-15, i.e., samples E3@5' and D6@15' (see Table 9).

4.0 OFF-SITE IMPACTED PROPERTIES

There are two properties adjacent to the Site that are known to be impacted, i.e., Pilot Chemical Company located at 11756 Burke Street and Phibro-Tech, Inc. located at 8851 Dice Road, as well as regional contamination identified for the area by the Water Replenishment District of Southern California (WRD) (see WRD, 2007).

4.1 PILOT CHEMICAL

This property is about 4.3 acres in size, located immediately east of the Site across the railroad tracks, and was used to manufacture detergent for industrial purposes. Pilot Chemical is an active case being overseen by the RWQCB, Mr. Henry Jones is the Case Manager, and the matter is identified as Case No. 0383, Site ID No. 2041500. Chemicals of concern include both petroleum and chlorinated hydrocarbons.

Ground water monitoring for the Pilot Chemical site is completed on a semi-annual basis. Figure 7 depicts the approximate location of the 11 ground water wells associated with the Pilot Chemical site and Table 10 summarizes the most recent VOC ground water quality data available to EAI, i.e., April 2008 (see PEE, 2008). The ground water flow direction is reported as westerly-southwesterly.

4.2 PHIBRO-TECH, INC.

This property is about 4.8 acres in size, located immediately east-southeast of the Site across the railroad tracks, and receives various hazardous aqueous wastes and recyclable materials primarily from the electronic and aerospace industries and treats these substances to create usable new products. Phibro-Tech, Inc. is an active case being overseen by DTSC and Ms. Kathy San Miguel of the DTSC Cypress Office is the Case Manager.

Ground water monitoring was initiated at the Phibro-Tech, Inc. site over 20 years ago and continues as part of ongoing cleanup efforts. Three types of contaminants have generally been detected in ground water beneath the Phibro-Tech, Inc. site: (a) dissolved metals; (b) non-chlorinated VOCs; and (c) chlorinated VOCs (see IRIS, 2008). Elevated concentrations of dissolved metals such as hexavalent chromium have consistently been detected in the vicinity of Pond 1, a Resource Conservation & Recovery Act (RCRA) regulated former surface impoundment area located in the center of the facility.

There are over 20 ground water monitoring wells associated with the Phibro-Tech, Inc. site. Figure 7 depicts the approximate location of these wells and Table 10 summarizes the most recent VOC ground water quality data available to EAI, i.e., July 2008 (see IRIS, 2008). The ground water flow direction for the upper zone wells, i.e., 45 feet bgs, is reported as southwest. Although not reported on Table 10, hexavalent chromium concentrations for the July 2008 sampling event ranged from 0.0012 mg/L to 11 mg/L. Hexavalent chromium concentrations

were as high as 120 mg/L in 1989 and have fluctuated between non-detect and 33 mg/L since October 2001.

4.3 REGIONAL IMPACT

The WRD, in cooperation with the United States Geological Service (USGS), has completed a ground water contamination study to assess the Central Basin threat of multiple contamination plumes in the area (see WRD, 2007). The Central Basin includes the cities of Whittier and Santa Fe Springs.

Several large scale releases such as the Omega Chemical Corporation facility in Whittier, a federal Superfund Site being overseen by EPA with a ground water plume known to extend over three miles, McKesson Chemical Corporation facility in Santa Fe Springs being overseen by DTSC, and Angeles Chemical Company, Inc. in Santa Fe Springs being overseen by DTSC, have resulted in regional ground water impacts to the area, which includes the Site. The chemicals of concern are PCE (primary chemical of concern), TCE and their breakdown products. TCE is a known breakdown product of PCE. Figure 8 depicts the regional PCE plume for the WRD Central Basin.

5.0 HUMAN HEALTH SCREENING EVALUATION

Figure 9 presents a Site Conceptual Model.

5.1 SOIL

Table 1, Table 2, Table 5 and Table 6 summarize the results of testing soil samples collected from the Site to date and include SSLs, SLCCs and CHHSLs for screening purposes. SSLs have been developed by the RWQCB for the protection of ground water, and SLCCs by EPA and CHHSLs by Cal-EPA for the protection of human health.

Residential and commercial CHHSLs are applicable to soils that are at the ground surface or could be brought to the ground surface at some time in the future, with subsequent potential exposure by human receptors. A depth of more than three meters (approximately 10 feet) is generally used to delineate "deep" soils that are likely to remain isolated in the subsurface versus "shallow" soils that may be exposed during future redevelopment activities (see Cal-EPA, 1996).

5.1.1 Hydrocarbons

Historical media sampling at the Site for hydrocarbons (see Table 1) did not identify any locations where chemicals were detected above SLCCs or CHHSLs established for residential or commercial land use. Hydrocarbons above SSLs were identified only for sample locations HA-1@2', boring E-9 between 10 feet and 31 feet, boring B-7 between 10 feet and 25 feet, and sample location SS-4@2'.

BEA completed excavation efforts in 2006 covering boring locations E-9 and B-7 (see Figure 4). These efforts removed impacted soil down to about 20 feet at these two locations and confirmation soil samples did not contain any hydrocarbons above SSLs, SLCCs or CHHSLs (see Table 5).

EAI addressed Subsurface Unit No. 1 through Subsurface Unit No. 5 in February 2009 (see Figure 5). Only the soil sample collected from 15 feet bgs associated with Subsurface Unit No. 3 contain a TPH-D concentration which exceeds the SSL standard of 1,000 mg/kg, i.e., TPH-D at 4,940 mg/kg for Sample 4@15'. However, Sample 4@15' did not contain any detectable concentrations of SVOCs or any VOCs above SSLs standards (see Table 6). Elevated concentrations of hydrocarbons were detected in soil Stockpile D, and therefore, this soil will be shipped off-site for processing.

The following lists areas of the Site where hydrocarbons are present in soil above SSLs, but below SLCCs and CHHSLs established for commercial land use:

Year/Sample Location and Depth	Chemicals of Concern (mg/kg)
1994: HA-1@2'	TPH-O@30,000
1994: E-9@25' 1994: E-9@31'	TRPH@15,600 TRPH@10,900
1994: B-7@25'	TPH-O@12,330 and PCE@0.51
1996: SS-4@2'	TPH-G@743 and TPH-D@3,590
2009: Sample 4@15'	TPH-D@4,940

With the exception of locations HA-1 and SS-4, the other three locations (E-9, B-7 and Sample 4) have impacted soils at depths equal to or greater than 15 feet bgs, and therefore, will not be disturbed as part of the future redevelopment (warehouse) proposed for the Site. Further, these three areas are all outside the footprint of the proposed new warehouse building (see Figure 10) and could be addressed at a later date, if necessary. However, given the fact that heavy end petroleum hydrocarbons are the chemical of concern for these three areas, i.e., only PCE was detected at 0.51 mg/kg for sample location B-7@25' and this was in 1994, over 14 years ago and this PCE concentration has since likely been degraded, and the results of the soil gas survey, EAI proposes to leave the deep soils for locations E-9, B-7 and Sample 4 in-place.

With respect to the shallow impacted soils associated with locations HA-1 and SS-4, EAI proposes to excavate and ship these soils off-site for processing (see Section 6.2).

5.1.2 Title 22 Metals

No Title 22 metals, except arsenic, were detected in soil samples above SLCCs or CHHSLs established for commercial land use. Arsenic was detected at concentrations ranging from 0.870 mg/kg to 55 mg/kg. However, metals (including arsenic) are naturally occurring elements typically found in native California soils. Per Department of Toxic Substances Control (DTSC) guidelines (see DTSC, 1999) metals detected at background concentrations or levels determined by DTSC to be safe maybe eliminated as chemicals of concern. DTSC has established 12 mg/kg as a background arsenic concentration for Los Angeles Unified School District (LAUSD) school sites (see DTSC, 2009).

In order to determine the upper 95 percent confidence level (95% UCL) for arsenic detected in soil at the Site, EAI used ProUCL 4.0, a computer program developed by the EPA (see EPA, 2007). The results of the evaluation are presented in Appendix D and summarized below:

Descriptive Statistics	Value
Total Number of Samples	39
Number of Samples below Detection Limit	20 (or 51.28%)
Maximum Detected Concentration of Arsenic	55 mg/kg
Maximum Detection Limit	5.0 mg/kg
Minimum Detection Limit	0.3 mg/kg
95% UCL by EPA Recommended Kaplan-Meier Method	12.99 mg/kg

The 95% UCL arsenic concentration in soil for the Site of 12.99 mg/kg is very close to (within the range of) the 12 mg/kg background concentration determined acceptable by DTSC for LAUSD school sites, i.e., one of DTSC's most sensitive (restrictive) land uses.

The Site is zoned for heavy industrial/manufacturing land use (M-2) and currently is almost completely paved with asphalt and/or concrete or covered by buildings, i.e., only minimal landscaping that fronts the Site exists along Burke Street (see Figure 7). An approximately 108,000 square foot warehouse is proposed for the West Parcel of the Site (see Figure 10) and the remaining area will be paved with asphalt or concrete for parking. Therefore, once redeveloped, there will be no exposure pathway for contact with Site soils. This coupled with the deed restriction that the City will require for the Site (see Section 5.2.7) along with proper contractor notification and monitoring during Site redevelopment will be sufficient to address the arsenic, and therefore, in EAI's opinion, no other actions for arsenic are required.

5.2 SOIL GAS

A human health screening evaluation was completed to determine if the VOCs detected in soil gas beneath the Site at 5 feet bgs and 15 feet bgs are problematic. This screening evaluation for human health effects involves identifying chemicals of concern, evaluating exposure pathways and media of concern, assessing chemical toxicity, and subsequently, characterizing risks. Estimated health risks are based on a calculated dose (i.e., the amount of chemical intake), which integrates exposure parameters for the receptors of concern (e.g., contact rates, exposure frequency and duration), with chemical-specific toxicity criteria (e.g., reference doses and slope factors) and exposure concentrations for the media of concern. The calculated risks are then compared to health-based guidelines developed by the DTSC. For the purpose of this screening evaluation, the potential risks are calculated based on both a hypothetical residential exposure and commercial land-use scenario. The Site is currently zoned for manufacturing/industrial land use.

Exposure to chemicals can only occur if there is a complete pathway by which chemicals in Site soil, water, or air can be contacted by humans. Therefore, the evaluation of exposure pathways and media of concern is the first step in the human health screening evaluation. The results of the human health screening evaluation for indoor air soil gas intrusion are summarized in the risk characterization section.

5.2.1 Chemicals of Concern

The chemicals detected in soil gas beneath the Site at 5 feet bgs, 15 feet bgs, and their maximum concentrations are listed below:

	Maximum Concentration 5 feet bgs (ug/L)	Maximum Concentration 15 feet bgs (ug/L)
Propene	0.23	0.021
Trichlorofluoromethane	<0.005	0.011
Acetone	0.32	0.55
1,1-DCE	<0.005	0.0059
Carbon Disulfide	0.036	0.001
1,1-DCA	<0.005	0.0058
MEK	0.23	0.0091
Chloroform	<0.005	0.15
Benzene 0.122	< 0.26	0.16
Carbon Tetrachloride	<0.005	0.17
TCE 1.77	> 0.016	3.7
Toluene 378	> 0.057	1.0
PCE 0.603	> 0.47	17
Chlorobenzene	0.009	<0.005
Ethylbenzene	0.015	0.65
Xylenes	0.077	3.22
1,2,4-TMB	0.017	0.0094
1,3,5-TMB	0.0058	<0.005

5.2.2 Exposure Pathways

Exposure to vapors which may intrude into indoor air was evaluated for the VOCs detected in soil vapor. The Site when developed will be covered almost entirely by a building or paved with asphalt/concrete for parking which precludes the potential for direct contact with soil by future building occupants or visitors. Figure 9 is a Site Conceptual Model of the pathway evaluated by this human health screening evaluation, i.e., exposure to vapors intruded into indoor air. No other exposure pathways were considered.

Exposure to human receptors may occur through infiltration of soil gas into the indoor space. The highest concentrations of individual chemicals detected in soil gas beneath the Site were used for evaluating subsurface gas intrusion into the proposed Site building. To evaluate the health risk, the highest detected concentrations for all of the VOCs detected were input in the DTSC version of SG-Screen Model (see DTSC, 2005).

5.2.3 Exposure Concentrations and Chemicals

Section 5.2.1 summarizes the chemicals detected in soil gas beneath the Site at 5 feet bgs and 15 feet bgs. The health risk calculations were based on using:

- Residential land use scenario and commercial land use scenario.
- Maximum chemical concentrations detected in soil gas as exposure point concentrations.

- Average vapor flow rate into the new building proposed for the Site of 5 liters per minute.

- DTSC model default values for soil physical parameters, e.g., percent moisture content and dry density.

5.2.4 Toxicity Values

The toxicity assessment characterizes the relationship between the magnitude of exposure to chemicals of concern, and the nature and magnitude of adverse health effects that may result from such exposure. For purposes of calculating exposure criteria to be used in risk assessments, adverse health effects are classified into two broad categories, non-carcinogens and carcinogens. Toxicity values/exposure criteria are generally developed based on the threshold approach for non-carcinogenic effects and the non-threshold approach for carcinogenic effects. Toxicity values may be based on epidemiological studies, short-term human studies, and subchronic or chronic animal data.

Toxicity values used in this screening evaluation are from DTSC's Screening Model Lookup tables, except for propene and the inhalation slope factor for ethylbenzene, which are from the Office of Environmental Health Hazard Assessment (OEHHA) toxicity database.

5.2.4.1 Carcinogenic Health Effects

Certain chemicals are regulated as carcinogens based on the likelihood that exposure could cause cancer in humans. Numerical estimates of cancer potency for these chemicals are presented as cancer slope or potency factors. The cancer potency factor defines the cancer risk due to constant lifetime exposure to one unit of a carcinogen (units of risk per $[ug/m^3]^{-1}$). Cancer potency factors are derived by calculating the 95% UCL on the slope of the linearized portion of the dose-response curve using the multistage cancer model on study data. Use of the 95% UCL of the slope means that there is only a 5 percent chance that the probability of a response could be greater than the estimated value for the experimental data used. This is a conservative approach and may overestimate the actual risk given that the actual risk is expected to be between zero and the calculated value. Carcinogenicity potency factors assume no threshold for effect, i.e., all exposures to a chemical are assumed to be associated with some risk, i.e., there is no threshold below which the risk is negligible or unlikely. If there are thresholds for carcinogenicity, the true risks could be zero at sufficiently low doses. Table 11 presents the cancer potency factors used in this health risk assessment.

5.2.4.2 Non-Carcinogenic Health Effects

A range of exposures is assumed to exist from zero to some finite value (a threshold) that can be tolerated by the organism without appreciable risk of an adverse health effect occurring for the purposes of assessing risks associated with non-carcinogenic effects.

Non-carcinogenic health effects were evaluated using reference concentrations (RfCs) developed by the EPA. The RfC is a health-based criterion based on the assumption that thresholds exist for non-carcinogenic toxic effects (e.g., lung or liver damage). In general, the RfC is an estimate (with uncertainty spanning perhaps an order of magnitude) of a daily exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious health effects during a lifetime of exposure. RfCs are expressed as acceptable daily doses in mg/m^3. Table 11 presents the RfCs used in this health risk assessment.

5.2.5 Risk Characterization Summary

Risk characterization integrates the quantitative and qualitative results of data evaluation, exposure, and toxicity assessments. The purpose is to estimate the likelihood, incidence, and nature of potential human health effects to defined receptor populations that may occur as a result of exposure to the chemicals of concern at the Site.

A total of 18 VOCs were identified in soil gas samples collected from the Site (see Section 5.2.1). Table 12 summarizes the chemical specific cancer and non-cancer risks for the Site based on soil gas data from 5 feet bgs, and Table 13 for soil gas data from 15 feet bgs.

5.2.5.1 Carcinogenic Risks

Carcinogenic risks are expressed as the upper-bound, increased likelihood of an individual developing cancer as a result of exposure to a particular chemical. For example, a cancer risk of 1×10^{-6} (one per million) refers to an upper-bound increased chance of one person developing cancer assuming one million people are exposed. The potential increase in cancer risk from exposure to chemicals detected in soil gas is in addition to a background risk of developing cancer. The background cancer risk is about one in three (0.33) for every American female, and one in two (0.5) for every American male of eventually developing cancer (see ACS, 1997). A cancer risk of one per million or less is typically considered acceptable for a residential land use scenario and 10 per million or less acceptable for a commercial land use scenario.

The results of the cancer risk calculations for the air exposure pathway, using the air concentrations derived from the DTSC SG-Screen Model (see Appendix E), are provided in Table 12 and Table 13. The cancer risks associated with hypothetical residential exposures and commercial exposures are:

Soil Gas Depth	Residential	Commercial
5 feet bgs	3.8E-06 or 3.8 per million	2.3E-06 or 2.3 per million
15 feet bgs	1.6E-05 or 16 per million	9.8E-06 or 9.8 per million

It should be noted that PCE accounts for approximately 81% of the risk associated with soil gas data from 15 feet bgs (see Table 13), and PCE is the only chemical detected in all 28 soil gas samples collected from 15 feet bgs and was detected only in 16 of the 29 soil gas samples collected (55%) from 5 feet bgs (see Section 3.3). The presence of PCE in soil gas appears to be

primarily the result of volatilization from the regionally contaminated ground water which is evidenced by higher concentration and frequency of detection at 15 feet bgs versus lower concentration and frequency of detection at 5 feet bgs, due to an upward diffusion process governed by Fick's law.

Another methodology that can be utilized to calculate risks is use of the 95% UCL for all chemicals detected as exposure point concentrations. However, with the exception of PCE in soil gas at 15 feet bgs, the frequency of detection for all other chemicals detected at 5 feet bgs and 15 feet bgs is insufficient to calculate the 95% UCL (see Section 3.3). However, if you use the upper 95% UCL for PCE detected in soil gas at 15 feet bgs, i.e., 8.123 ug/L (see Appendix D), instead of the maximum concentration of 17 ug/L, along with the maximum concentrations for all other chemicals detected at 15 feet bgs, reduces the residential risk from 16 per million to 9.5 per million and the commercial risk from 9.8 per million to 5.6 per million (see Table 14).

5.2.5.2 Non-Carcinogenic Health Hazards

The potential for noncarcinogenic effects due to exposure to a particular chemical is expressed as the hazard quotient. A hazard quotient is the ratio of the estimated intake or average daily dose of a chemical to the corresponding chemical-specific toxicity value or RfC. The hazard quotients are then compared to an acceptable hazard level. Implicit in the hazard quotient is the assumption of a threshold level of exposure below which no adverse effects are expected to occur. If the hazard quotient exceeds 1.0 (i.e., site specific exposures would exceed the RfC), then the potential for non-carcinogenic adverse effects may exist. Hazard quotients less than 1.0 indicate that no adverse health effects are expected to occur from exposure to chemicals of concern at the Site.

The hazard index associated with hypothetical residential exposures and commercial exposures are (see Table 12, Table 13 and Appendix D):

Soil Gas Depth	Residential	Commercial
5 feet bgs	1.5E-02 or 0.015	1.4E-02 or 0.014
15 feet bgs	1.7E-01 or 0.17	1.0E-01 or 0.1

5.2.6 Uncertainty Analysis

The purpose of a risk assessment is not to predict the actual risk of exposure to an individual. Risk assessments are a management tool for developing conservative estimates of health hazards that are unlikely to underestimate the true risk for potentially exposed populations. The numerical estimates in a risk assessment have associated uncertainties reflecting the limitations in available knowledge about site concentrations, exposure assumptions (e.g., exposure concentrations, intake rates) and chemical toxicity. Where information is incomplete, conservative assumptions (assumptions that err on being overprotective) are made. The greater the uncertainty, the more conservative are the assumptions, in an attempt to be protective of public health. In other words, although calculations of exposure often must be simplified to a

few pathways or subgroups within a population, the simplifying assumptions should be more likely to overestimate than underestimate risk so that public health is protected regardless of the other unknown conditions. Even when actual characteristics of a population are known, assumptions on exposure are often biased toward producing over protective rather than under protective health risk estimates for most of the population.

Risk assessment procedures are thus designed to result in a conservative estimate of risk in order to be protective of the majority of the population and to compensate for uncertainties inherent in estimating exposure and toxicity.

Both the carcinogenic and hazard risks were based upon the maximum detected concentration of the chemicals of concern from a single sample point. If a site-wide average of the detected values for the chemicals of concern were used in determining the carcinogenic and hazard risks, the results of the risk assessment would be considerably lower.

In summary, every aspect of the risk assessment contains multiple sources of uncertainty. Simplifying assumptions are made so that health risks can be estimated quantitatively. Because the exact amount of uncertainty cannot be quantified, the risk assessment is intended to overestimate rather than underestimate probable risk. The results of the assessment therefore, are likely to be protective of health despite the inherent uncertainties in the process.

5.2.7 Conclusions

A total of 18 VOCs were detected in soil gas samples collected from beneath the Site. A human health screening evaluation was completed using the maximum concentrations of chemicals detected in soil gas at 5 feet bgs and 15 feet bgs as exposure point concentrations. The results of the risk assessment indicate an incremental cancer risk below 10 per million which is typically considered acceptable for commercial development. The hazard quotient is also below the threshold level of 1.0.

Because the incremental cancer risk is above the one per million standard typically considered acceptable for residential development, but below the 10 per million standard typically considered acceptable for commercial/industrial development, the City of Santa Fe Springs has indicated to the property owner that a deed restriction will be required for the Site. The deed restriction will limit development at the Site to industrial, commercial or office space, and preclude residences for human habitation, hospitals, schools for persons under 21 years of age, and day care centers for children or senior citizens.

6.0 WORK PLAN

Field activities will be completed under the supervision of an EAI California registered geologist or California registered civil engineer in accordance with the health and safety guidelines outlined in the EAI report for the Site titled "*Health and Safety Plan*," a copy of which is included as Appendix C of EAI, 2008.

Prior to initiating field activities, sampling and excavation locations will be marked, Underground Service Alert (USA) will be notified, and a dig alert number obtained.

6.1 GROUND WATER MONITORING WELLS

In order to provide additional information on the quality of ground water beneath the Site, two ground water monitoring wells are proposed as approximately depicted on Figure 10.

6.1.1 Permits

A Permit to install the wells will be obtained from the County of Los Angeles Environmental Health Division, Bureau of Environmental Protection, Water Quality Program.

6.1.2 Soil Sampling

All borings will be advanced by a C-57 Water Well Driller and logged in accordance with the Unified Soil Classification System. Soil samples will be collected from each boring being at 5 feet bgs and at 5 foot intervals thereafter until termination for logging purposes. The soil samples will be collected using three 2-inch diameter by 6-inch long tubes mounted within a 2-inch inside diameter split-spoon drive sampler employed in advance of the augers. After sample recovery, EnCore® samplers (conforming to EPA Method 5035) will be used to collect the soil samples from the lowermost 6-inch long tube for analytical testing.

A MiniRAE Plus Photo-Ionization Detector (PID) calibrated against a n-hexane gas standard, or equivalent instrument, will be used on the soil contained in the second tube from the bottom of the shoe, at each sampling interval within the borings, to determine if volatile hydrocarbon vapors are emanating directly from the soil. Each sample will be placed in an airtight "Ziploc" plastic bag. The soil samples will be allowed to sit in the bags for a minimum of five minutes and then the headspace in the bags will be analyzed using the PID. The results of this field-testing will be recorded on the boring log.

6.1.3 Ground Water Well Construction

Two ground water monitoring wells are presently located on the Site, with MW-1 being 53 feet deep and MW-2 being 55 feet deep (see Table 7). On February 19, 2009, well MW-1 was dry and water was encountered in well MW-2 at 39.70 feet bgs (see Table 3). Ground water data for

the adjacent Pilot Chemical and Phibro-Tech, Inc. facilities indicate ground water is present at about 45 feet bgs (see Figure 7).

The planned termination depth of the wells is 70 feet bgs, but may need to be modified depending upon conditions encountered in the field.

The wells will be drilled using 8-inch outside diameter continuous flight hollow stem augers. The wells will be constructed of 2-inch inside diameter Schedule 40 polyvinyl chloride casing to a depth of about 70 feet bgs, assuming ground water is encountered between 55 and 60 feet bgs. Each well will be constructed with a slotted section (0.02-inch x 1.5-inch slots) which will extend between 40 and 70 feet bgs. The annular space between the borehole wall and well casing will be backfilled with grade #3 Monterey sand to about three feet above the slotted section. A surge block will be used to settle the filter pack prior to placement of the bentonite seal. An approximate two-foot thick layer of hydrated bentonite chips will be placed on top of the sand pack. The remaining annular space will be grouted to within 6-inches of the surface with a bentonite/cement grout. Flush mounted traffic grates will be placed on each well to prevent sheet flow from entering the well. Figure 11 depicts the proposed well construction details.

6.1.4 Well Development

The wells will be allowed to sit at least 48 hours after construction, prior to development. The wells will be developed until the water is relatively free of settable solids.

6.1.5 Well Elevation Survey

Wells will be surveyed to the requirements of GeoTracker, including the two existing Site wells.

6.1.6 Well Sampling

Prior to initiating any purging or sampling activities, depth measurements to fluid levels in all wells associated with the Site will be obtained using an interface probe accurate to 0.01 foot. These data will be used to construct a ground water elevation map for the Site.

Prior to collecting ground water samples from the wells for analytical testing, the wells will be purged of approximately four well casing volumes of water. Temperature, conductivity, turbidity and pH readings will be recorded to evaluate the effectiveness of purging activities. The samples will be collected from just below the water surface using disposable bottom bailers equipped with VOC sampling tips. The samples will be sealed in 40-milliliter volatile organic analysis (VOA) vials with Teflon septa lined lids. Each vial will be completely filled so that no headspace exists between the sample and the lid.

6.1.7 Sample Identification, Documentation, Packaging and Shipping

To identify and manage the samples collected in the field, a sample label will be affixed to each sample container. Each sample label will include the following information:

- Sample identification number
- Date and time of sample collection
- EAI project number
- Name of client
- Name of sampler

Following sample collection and labeling, the ground water samples will be placed into a high quality ice chest for temporary storage and transport to the analytical laboratory. The following protocol will be used for sample packaging:

- A self-adhesive sample label will be placed across the lid of each sample container, acting not only as a sample label but also as a custody seal.

- The samples will be placed in leak-proof "Ziploc" plastic bags.

- The samples will then be placed into a high quality ice chest which will include ice to keep the samples chilled during transport to the laboratory. The drain plug of the ice chest will be secured using tape to preclude melting ice from leaking out of the cooler.

- The chain of custody record (COC) forms will be placed in a "Ziploc" water-resistant plastic bag and taped to the inside lid of the cooler.

- The samples will be kept chilled until delivered to the laboratory for analytical testing.

COC record forms will be used to document sample collection and shipment to the laboratory for analytical testing. The COC record form identifies the contents of each shipment, the analytical testing to be completed on each sample, and maintains the custodial integrity of the samples.

6.1.8 Decontamination Procedures

The augers will be steam cleaned between each boring. The equipment used to collect the soil samples will be decontaminated prior to each sampling, to assure the quality of the samples collected. The sampling equipment will be decontaminated using the following procedure: (1) all excess soil will be scrapped off the sampler; (2) the sampler will be washed in a solution of non-phosphate detergent (Alconox) and tap water; and (3) the sampler will be rinsed with tap water. The submersible pump used only to develop the wells prior to sampling will be decontaminated using steps 2 and 3 above.

6.1.9 Management of Wastes

In the process of collecting media samples during the field-sampling program, potentially contaminated investigation-derived wastes (IDW) will be generated. These wastes include spent personal protective equipment (PPE), soil cutting, and decontamination and well development/purging fluids. Spent PPE, e.g., gloves, will be double bagged and placed in a municipal refuse dumpster.

Soil cuttings and the liquid effluent generated from decontaminating sampling equipment and sampling the ground water wells will be sealed in labeled 55-gallon drums. The drums will remain on-site, pending the results of the analytical testing of the soil and ground water samples collected in the field, at which time an appropriate disposal method will be determined.

6.1.10 Analytical Testing

The ground water and soil samples will be delivered to Enviro-Chem, Inc. (ECI) for analytical testing. ECI is a State of California certified hazardous waste testing laboratory (ELAP Certification No. 1555) certified for all tests proposed as part of this investigation. Each ground water sample and selected soil samples will be analyzed for TPH-G and TPH-D by modified EPA Method 8015, and full-range VOCs including fuel oxygenates by EPA Method 8260B. Additionally, the ground water samples will be analyzed for total chromium by EPA Method 200.7, and hexavalent chromium by EPA Method 218.6.

6.2 ADDITIONAL EXCAVATION

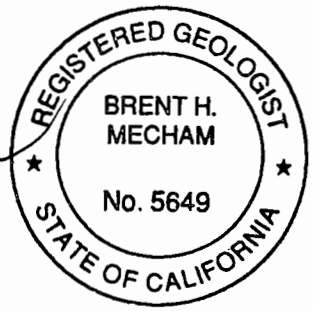
The shallow impacted soils associated with locations HA-1 and SS-4 will be excavated and removed from the Site. Excavation efforts, air monitoring, confirmation soil sampling, analytical testing, backfilling and compaction of the excavated areas, and reporting will be completed as outlined in the EAI Work Plan (see EAI, 2008) and EAI Work Plan Addendum (see EAI, 2009A) prepared for the Site.

7.0 LIMITATION

Our professional services have been performed using that degree of knowledge, diligence, care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at this time. EAI assumes that information provided by third parties is true, accurate and reliable. This report has been prepared for Mr. Larry Patsouras. Use of this report by any other party shall be at such party's sole risk. The findings and conclusions contained in this report are based on information contained and/or referenced herein, and our best judgment. No other warranty, expressed or implied, is made as to the professional advice contained in this report.

Respectfully submitted,

ENVIRONMENTAL AUDIT, INC.



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United States Environmental Protection Agency, Region IX, "Regional Screening Levels for Chemical Contaminants at Superfund Sites," dated May 20, 2008 (EPA, 2008).

Water Replenishment District of Southern California, "Central Basin Groundwater Contamination Study," dated December 11, 2007 (WRD, 2007).

TABLES

TABLE 1
HISTORICAL (1994 - 1999) SOIL TESTING RESULTS - HYDROCARBONS
11630 - 11700 Burke Street, Santa Fe Springs, CA 90670
(concentrations in milligrams per kilogram - mg/kg)

Original in Color

			(8015M)			(418.1)	(8020/8240/8260B)																
Firm	Samples ID	Date	TPH-G	TPH-D	TPH-O	TRPH	Toluene	Xylenes	Ethyl benzene	PCE	TCE	Methylene Chloride	Acetone	TCFM	n-Butyl benzene	n-Propyl benzene	Naphthalene	p-Isopropyl toluene	sec-Butyl benzene	MEK	1,2,3-TCP	1,2,4-TMB	1,3,5-TMB
WEST PARCEL - UNDERGROUND STORAGE TANKS																							
EAI	E-1@4-6'	11/29/94	<10	<10	NA	<5	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	E-1@9-11'	11/29/94	<10	<10	NA	22	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	E-1@14-16'	11/29/94	<10	<10	NA	32	<0.005	0.0481	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	E-1@19-21'	11/29/94	<10	<10	NA	9	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	E-1@24-26'	11/29/94	<10	<10	NA	15	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	E-2@4-6'	11/29/94	<10	<10	NA	NA	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	E-2@9-11'	11/29/94	<10	<10	NA	NA	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	E-2@14-16'	11/29/94	<10	<10	NA	NA	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	E-2@19-21'	11/29/94	<10	<10	NA	NA	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	E-2@24-26'	11/29/94	<10	<10	NA	NA	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	E-3@4-6'	11/29/94	<10	<10	NA	NA	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	E-3@9-11'	11/29/94	<10	<10	NA	NA	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	E-3@14-16'	11/29/94	<10	<10	NA	NA	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	E-3@19-21'	11/29/94	<10	<10	NA	NA	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	E-3@24-26'	11/29/94	<10	<10	NA	NA	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	E-4@4-6'	11/29/94	<10	<10	NA	NA	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	E-4@9-11'	11/29/94	<10	<10	NA	NA	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	E-4@14-16'	11/29/94	<10	<10	NA	NA	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	E-4@19-21'	11/29/94	<10	<10	NA	NA	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	E-4@24-26'	11/29/94	<10	<10	NA	NA	<0.005	<0.01	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AGI USTs Removal Samples	B1A@14.5'	03/24/98	<0.5	NA	NA	NA	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	B1B@14.5'	03/24/98	<0.5	NA	NA	NA	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	B2A@14.5'	03/24/98	<0.5	<10	NA	<10	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	B2B@14.5'	03/24/98	<0.5	<10	NA	<10	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	B2C@14.5'	03/24/98	<0.5	<10	NA	<10	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WEST PARCEL - CLARIFIERS (Historical Paint/Steam Cleaning Areas)																							
PSII	HA-2@10'	08/04/94	<3	<3	<3	NA	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0056J	<0.0026	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0026	0.0033	<0.0013	<0.0013
	HA-3@4.5'	08/04/94	<3	<3	<3	NA	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.003J	<0.0026	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0026	<0.0013	<0.0013	<0.0013
EAI	E-5@4-6'	11/29/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-5@9-11'	11/29/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-5@14-16'	11/29/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-5@19-21'	11/29/94	NA	NA	NA	11	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-6@4-6'	11/29/94	NA	NA	NA	11	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-6@9-11'	11/29/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-6@14-16'	11/29/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-6@19-21'	11/29/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-6@24-26'	11/29/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
EAI	S-3@10'	02/10/99	NA	NA	NA	<10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	NA	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01	<0.01
	S-4@10'	02/10/99	NA	NA	NA	<10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	NA	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01	<0.01
	S-5@10'	02/10/99	NA	NA	NA	<10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	NA	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01	<0.01
	S-6@10'	02/10/99	NA	NA	NA	<10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	NA	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01	<0.01
	S-7@10'	02/10/99	NA	NA	NA	<10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	NA	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01	<0.01
	S-8@10'	02/10/99	NA	NA	NA	<10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	NA	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01	<0.01
	Pit@6'	02/10/99	NA	NA	NA	<10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	NA	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01	<0.01

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HISTORICAL (1994 - 1999) SOIL TESTING RESULTS - HYDROCARBONS
11630 - 11700 Burke Street, Santa Fe Springs, CA 90670
(concentrations in milligrams per kilogram - mg/kg)

Original in Color

			(8015M)			(418.1)	(8020/8240/8260B)															
Firm	Samples ID	Date	TPH-G	TPH-D	TPH-O	TRPH	Toluene	Xylenes	Ethyl benzene	PCE	TCE	Methylene Chloride	Acetone	TCFM	n-Butyl benzene	n-Propyl benzene	Naphthalene	p-Isopropyl toluene	sec-Butyl benzene	MEK	1,2,3-TCP	1,2,4-TMB	1,3,5-TMB
WEST PARCEL - MECHANICAL PIT																							
EAI	E-16@5'	12/01/94	NA	NA	NA	16	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-16@10'	12/01/94	NA	NA	NA	9	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
WEST PARCEL - MAINTENANCE SHOP (Clarifier)																							
PSII	B-5@4'	08/03/94	<3	<3	11.7	NA	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0064	<0.0026	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0026	<0.0013	<0.0013	<0.0013
EAI	E-17@5'	12/01/94	NA	NA	NA	9	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-17@10'	12/01/94	NA	NA	NA	13	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-17@15'	12/01/94	NA	NA	NA	6	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-17@20'	12/01/94	<10	<10	<10	98	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
EAI	S-1@10'	02/10/99	NA	NA	NA	<10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	NA	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01	<0.01
	S-2@10'	02/10/99	NA	NA	NA	<10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	NA	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01	<0.01
WEST PARCEL - EQUIPMENT STORAGE (Stained Area)																							
PSII	HA-4@2'	08/04/94	<3	<3	<3	NA	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0021J	<0.0026	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0026	<0.0013	<0.0013	<0.0013
WEST PARCEL - REMOVED STORM WATER CLARIFIER																							
EAI	S-9@10'	02/10/99	NA	NA	NA	<10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	NA	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01	<0.01
	S-10@10'	02/10/99	NA	NA	NA	<10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	NA	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01	<0.01
EAST PARCEL - STORAGE SHED																							
PSII	HA-1@2'	08/03/94	<3,000	<3,000	***30,000***	NA	<0.0013	<0.0013	<0.0013	0.0011J	<0.0013	<0.0013	0.1	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0075	<0.0013	<0.0013	<0.0013
EAI	E-8@5-6'	11/30/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-8@10-11'	11/30/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-8@15-16'	11/30/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-8@20-21'	11/30/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-9@5-6'	11/30/94	NA	NA	NA	1,350	<0.005	0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-9@10-11'	11/30/94	NA	NA	NA	**18,900**	**1.45**	3.37	0.384	0.061	0.033	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-9@15-16'	11/30/94	NA	NA	NA	**33,000**	**1.09**	2.61	0.287	0.023	0.042	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-9@20-21'	11/30/94	NA	NA	NA	**16,500**	0.017	0.0625	0.0075	0.059	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-9@24-25'	11/30/94	NA	NA	NA	***15,600***	<0.005	<0.01	<0.005	0.092	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-9@30-31'	11/30/94	NA	NA	NA	***10,900***	<0.005	<0.01	<0.005	**0.104**	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-11@5-6'	11/30/94	NA	NA	NA	NA	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-11@10-11'	11/30/94	NA	NA	NA	NA	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-11@15-16'	11/30/94	NA	NA	NA	NA	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
EAST PARCEL - ABANDONED CLARIFIERS																							
PSII	B-6@10'	08/03/94	<3	<3	<3	NA	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0071	0.0091J	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0026	<0.0013	<0.0013	<0.0013
	B-7@10'	08/04/94	<3,000	<3,000	**31,300**	NA	<0.0013	<0.0013	<0.0013	0.0027J	**0.27**	0.0043J	0.24	<0.0013	0.520	0.150	0.190	0.570	0.22	<0.0026	<0.0013	1.6	0.230
	B-7@15'	08/04/94	<300	<300	**12,330**	NA	<0.0013	<0.0013	<0.0013	**0.27**	0.0061	0.0018	<0.0026	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0026	<0.0013	<0.0013	<0.0013
	B-7@20'	08/04/94	NA	NA	NA	NA	0.0028J	<0.0013	<0.0013	**0.47**	0.0082	0.0016	<0.0026	0.0039J	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0026	<0.0013	<0.0013	<0.0013
	B-7@25'	08/04/94	<300	<300	***12,330***	NA	<0.0013	<0.0013	<0.0013	***0.51***	0.0082	0.0016	<0.0026	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0026	<0.0013	<0.0013	<0.0013
	B-7@35'	08/04/94	<3	<3	11.7	NA	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0063	<0.0026	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0026	<0.0013	<0.0013	<0.0013
EAI	E-7@0-1'	11/30/94	NA	NA	NA	2,710	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-7@7-8'	11/30/94	NA	NA	NA	82	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-7@15-16'	11/30/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-7@23-24'	11/30/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-7@31-32'	11/30/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-7@39-40'	11/30/94	NA	NA	NA	13	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-7@44-45'	11/30/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA

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Original in Color

			(8015M)			(418.1)	(8020/8240/8260B)															
Firm	**Samples ID**	**Date**	**TPH-G**	**TPH-D**	**TPH-O**	**TRPH**	**Toluene**	**Xylenes**	**Ethyl benzene**	**PCE**	**TCE**	**Methylene Chloride**	**Acetone**	**TCFM**	**n-Butyl benzene**	**n-Propyl benzene**	**Naphthalene**	**p-Isopropyl toluene**	**sec-Butyl benzene**	**MEK**	**1,2,3-TCP**	**1,2,4-TMB**	**1,3,5-TMB**
EAST PARCEL - ABANDONED CLARIFIERS																							
EAI	E-14@5'	12/01/94	NA	NA	NA	23	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-14@10'	12/01/94	NA	NA	NA	16	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-14@15'	12/01/94	NA	NA	NA	16	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-14@20'	12/01/94	NA	NA	NA	11	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-14@25'	12/01/94	NA	NA	NA	23	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-14@30'	12/01/94	NA	NA	NA	18	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-14@35'	12/01/94	NA	NA	NA	18	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-14@40'	12/01/94	NA	NA	NA	25	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-14@45'	12/01/94	NA	NA	NA	23	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-15@5'	12/01/94	NA	NA	NA	13	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-15@10'	12/01/94	NA	NA	NA	16	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-15@15'	12/01/94	NA	NA	NA	13	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-15@20'	12/01/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-15@25'	12/01/94	NA	NA	NA	18	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-15@30'	12/01/94	NA	NA	NA	9	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-15@35'	12/01/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-15@40'	12/01/94	NA	NA	NA	6	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-15@45'	12/01/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
EAST PARCEL - HISTORICAL STAINED AREAS																							
PSII	B-1@2'	08/03/94	<3	<3	<3	NA	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.014	<0.0026	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0026	<0.0013	<0.0013	<0.0013
	B-2@2'	08/03/94	<3	<3	<3	NA	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0053J	<0.0026	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0026	<0.0013	<0.0013	<0.0013
	B-3@2'	08/03/94	<3	<3	<3	NA	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0098	<0.0026	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0026	<0.0013	<0.0013	<0.0013
	B-4@2'	08/03/94	<3	<3	<3	NA	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0091	<0.0026	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0026	<0.0013	<0.0013	<0.0013
	B-8@2'	08/04/94	<60	<60	1,440	NA	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0038J	0.14	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.027	<0.0013	<0.0013	<0.0013
EAI	E-10@5-6'	11/30/94	NA	NA	NA	10	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-10@10-11'	11/30/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-10@15-16'	11/30/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-10@20-21'	11/30/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-12@5-6'	11/30/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-12@10-11'	11/30/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-12@15-16'	11/30/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
	E-12@20-21'	11/30/94	NA	NA	NA	<5	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	NA	NA	NA	NA	NA	<0.025	NA	NA	NA
EAI	SS-4@2' [a]	12/23/96	*743*	*3,590*	3,971	7,530	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		MAXIMUM	**743**	**3,590**	**31,300**	**33,000**	**1.45**	**3.37**	**0.384**	**0.51**	**0.27**	**0.014**	**0.24**	**0.0039J**	**0.52**	**0.15**	**0.19**	**0.57**	**0.22**	**0.027**	**0.0033**	**1.6**	**0.23**
		SSL	500	1,000	10,000	10,000	0.45	5.25	0.9	0.15	0.15	NE	NE	0.45	NE	NE	NE	NE	NE	NE	NE	NE	NE
		SLCC-R	NE	NE	NE	NE	5,000	600	5.7	0.57	2.8	11	61,000	800	NE	NE	3.9	NE	NE	28,000	0.091	67	47
		SLCC-I	NE	NE	NE	NE	46,000	2,600	29	2.7	14	54	610,000	3,400	NE	NE	20	NE	NE	190,000	0	280	200
		CHHSL-R	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
		CHHSL-I	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE

TABLE 1
HISTORICAL (1994 - 1999) SOIL TESTING RESULTS - HYDROCARBONS
11630 - 11700 Burke Street, Santa Fe Springs, CA 90670
(concentrations in milligrams per kilogram - mg/kg)

Original in Color

			(8015M)			(418.1)	(8020/8240/8260B)															
Firm	**Samples ID**	**Date**	**TPH-G**	**TPH-D**	**TPH-O**	**TRPH**	**Toluene**	**Xylenes**	**Ethyl benzene**	**PCE**	**TCE**	**Methylene Chloride**	**Acetone**	**TCFM**	**n-Butyl benzene**	**n-Propyl benzene**	**Naphthalene**	**p-Isopropyl toluene**	**sec-Butyl benzene**	**MEK**	**1,2,3-TCP**	**1,2,4-TMB**	**1,3,5-TMB**

Only those VOCs detected are listed
< = Not detected at laboratory reporting limit listed
NA = Not analyzed for this chemical
NE = Not established
(a) = Sample was also analyzed for PCBs and SVOCs. No PCBs or SVOCs were detected
SSL = Los Angeles RWQCB Soil Screening Levels - Guidance for VOC-Impacted Sites (March 1996) and Petroleum-Impacted Sites (May 1996)
SLCC-R = EPA Region 9 - "Screening Level for Chemical Contaminants at Superfund Sites" - Residential Land Use (September 2008)
SLCC-I = EPA Region 9 - "Screening Level for Chemical Contaminants at Superfund Sites" - Commercial/Industrial Land Use (September 2008)
CHHSL-R = Cal-EPA - "California Human Health Screeing Levels in Evaluation of Contaminated Properties" - Residential Land Use (January 2005)
CHHSL-I = Cal-EPA - "California Human Health Screeing Levels in Evaluation of Contaminated Properties" - Commercial/Industrial Land Use (January 2005)
J = Estimated concentration
0.27 = Concentration detected exceeds SSL. However, soil was excavated as part of the remediation efforts completed by BEA in 2006
0.51 = Concentration detected exceeds SSL

TPH-G = Total Petroleum Hydrocarbons as Gasoline
TPH-D = Total Petroleum Hydrocarbons as Diesel
TPH-O = Total Petroleum Hydrocarbons as Oil
TRPH = Total Recoverable Petroleum Hydrocarbons

TCE = Trichloroethene
PCE = Tetrachloroethene
TCFM = Trichlorofluoromethane
MEK = Methyl Ethyl Ketone (2-Butanone)

1,2,3-TCP = 1,2,3-Trichloropropane
1,2,4-TMB = 1,2,4-Trimethylbenzene
1,3,5-TMB = 1,3,5-Trimethylbenzene

TABLE 2
HISTORICAL (1994 - 1996) SOIL TESTING RESULTS - TITLE 22 METALS
11630 - 11700 Burke Street, Santa Fe Springs, CA 90670
(concentrations in milligrams per kilogram - mg/kg)

Original in Color

Firm	Samples ID	Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Total Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
WEST PARCEL - CLARIFIERS (Historical Paint/Steam Cleaning Areas)																			
PSII	HA-2@10'	08/04/94	<4	<4	117	0.8	<0.2	28.7	14.4	28.1	19	<0.002	<0.4	<0.7	<3.5	<0.3	<10	51.7	58.7
	HA-3@4.5'	08/04/94	<4	<4	191	1.1	<0.2	40.8	17.8	31.1	26	0.05	1.9	23.4	<3.5	<0.3	<10	65.9	121
WEST PARCEL - MAINTENANCE SHOP																			
PSII	B-5@4'	08/03/94	<4	32	119	0.7	<0.2	21.6	12.2	18.5	15	<0.02	<0.4	14.8	<3.5	<0.3	<10	41.4	46.4
WEST PARCEL - EQUIPMENT STORAGE (Stained Area)																			
PSII	HA-4@2'	08/04/94	<4	<4	112	0.8	<0.2	24	13.1	17.2	16	<0.02	<0.4	14.7	<3.5	<0.3	<10	46.3	51
EAST PARCEL - STORAGE SHED																			
PSII	HA-1@2'	08/03/94	<4	<4	111	0.6	<0.2	26.8	12.6	18.1	28	0.02	<0.4	13.1	<3.5	<0.3	<10	31.1	56.4
EAST PARCEL - ABANDONED CLARIFIERS																			
PSII	B-6@10'	08/03/94	<4	43	224	0.8	<0.2	36.6	17.4	31.5	26	0.04	<0.4	24.5	<3.5	0.4	<10	62.1	66.7
	B-7@10'	08/04/94	<4	29	193	0.7	<0.2	30.7	15.4	39.1	22	<0.02	<0.4	22.9	<3.5	<0.3	<10	47.5	87.6
	B-7@15'	08/04/94	<4	<4	54.9	0.4	<0.2	9.4	5.3	12.1	<3	<0.02	<0.4	7	<3.5	<0.3	<10	18.8	27.2
	B-7@25'	08/04/94	<4	<4	43.2	0.2	<0.2	7.8	4.4	15	6	<0.02	<0.4	6	<3.5	<0.3	<10	16.7	27
	B-7@35'	08/04/94	<4	50	188	0.9	<0.2	30.4	19.4	44.4	27	0.09	<0.4	25.5	<3.5	0.3	<10	67.9	83.2
EAST PARCEL - HISTORICAL STAINED AREAS																			
PSII	B-1@2'	08/03/94	<4	55	259	1.1	<0.2	45	21.9	50.4	31	0.02	2.4	32.2	<3.5	<0.3	<10	79.8	78.2
	B-2@2'	08/03/94	<4	<4	136	5.6	<0.2	<0.2	12.4	21.6	12	<0.002	<0.4	<0.7	<3.5	<0.3	<10	42.5	53.1
	B-3@2'	08/03/94	<4	45	127	1.1	<0.2	39.5	19.1	30.4	30	<0.002	2.1	25.8	<3.5	<0.3	<10	75.1	74.9
	B-4@2'	08/03/94	<4	19	111	0.6	<0.2	18.3	7	17.5	14	0.02	1.5	10.4	<3.5	<0.3	<10	32.5	40
	B-8@2'	08/04/94	<4	<4	148	0.6	1	71.1	*46.2*	113	47	0.05	36.8	100	<3.5	<0.3	<10	36.4	85.3
EAI	SS-1@3"	12/23/96	NA	<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SS-2@3"	12/23/96	<6	<5	77.3	<0.6	*1.9*	12.8	4.7	13.5	<6	<0.25	<2.5	6	<8	<2.5	<8	24.7	27
	SS-3@3"	12/23/96	NA	<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	SS-5@1'-2'	12/23/96	NA	<5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MAXIMUM		**ND**	**55**	**259**	**5.6**	**1.9**	**71.1**	**46.2**	**113**	**47**	**0.09**	**36.8**	**100**	**ND**	**0.4**	**ND**	**79.8**	**121**

SSL	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
SLCC-R	31	0.39	15,000	160	70	120,000	23	3,100	400	23	390	1,600	390	390	5.1	390	23,000
SLCC-I	410	1.6	190,000	2,000	810	150,000	300	41,000	800	310	5,100	20,000	5,100	5,100	66	5,200	310,000
CHHSL-R	30	0.07	5,200	150	1.7	100,000	660	3,000	150	18	380	1,600	380	380	5.0	530	23,000
CHHSL-I	380	0.24	63,000	1,700	7.5	100,000	3,200	38,000	3,500	180	4,800	16,000	4,800	4,800	63	6,700	100,000

< = Not detected at laboratory reporting limit listed
NA = Not analyzed for this chemical
NE = Not established
SSL = Los Angeles RWQCB Soil Screening Levels - Guidance for VOC-Impacted Sites (March 1996) and Petroleum-Impacted Sites (May 1996)
SLCC-R = EPA Region 9 - "Screening Level for Chemical Contaminants at Superfund Sites" - Residential Land Use (September 2008)
SLCC-I = EPA Region 9 - "Screening Level for Chemical Contaminants at Superfund Sites" - Commercial/Industrial Land Use (September 2008)
CHHSL-R = Cal-EPA - "California Human Health Screeing Levels in Evaluation of Contaminated Properties" - Residential Land Use (January 2005)
CHHSL-I = Cal-EPA - "California Human Health Screeing Levels in Evaluation of Contaminated Properties" - Commercial/Industrial Land Use (January 2005)
32 = Concentration detected exceeds SLCC-R, SLCC-I, CHHSL-R and CHHSL-I standards
46.2 = Concentration detected exceeds SLCC-R or CHHSL-R standards, but is below SLCC-I and CHHSL-I standards

TABLE 3
SUMMARY OF GROUND WATER ELEVATION AND TESTING RESULTS - HYDROCARBONS
11630 - 11700 Burke Street, Santa Fe Springs, CA 90670
(concentrations in micrograms per liter - ug/L)

Well	Date	Well Casing Elevation (feet MSL)	Depth to Ground Water (feet bgs)	Ground Water Elevation (feet MSL)	TPH-G	TPH-D	TPH-O	Toluene	Xylenes	Chloroform	Carbon Tetra-chloride	1,1,1-TCA	1,1-DCA	1,2-DCA	1,1-DCE	TCE	PCE
MW-1	10/05/95	152.83	35.83	117.00	NA	NA	NA	<1	<2	1.9	<1	1.4	<1	<1	2.2	7.4	158
	01/13/97		38.33	114.50	NA	NA	NA	1.9	2.7	4.5	1.1	1.3	<0.5	0.5	4.3	11.4	93
	02/19/09	DRY			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-2	01/13/97	149.66	32.14	117.52	NA	NA	NA	<0.5	<1.0	1.5	<0.5	7.9	1.3	<0.5	33.2	14.5	296
	02/19/09		39.70	109.96	<50	<500	<3,000	<1	<2	<1	<1	<1	<1	<1	<1	<1	7.19
	Maximum Contaminant Level				**NE**	**NE**	**NE**	**150**	**1,750**	**NE**	**0.5**	**200**	**5**	**0.5**	**6**	**5**	**5**

Only those volatile organic compounds detected are listed. Sample collected from well MW-2 on February 19, 2009 also analyzed for ETBE, DIPE, MTBE, TAME, TBA and Ethanol
Elevations for wells MW-1 and MW-2 based on established elevation (151.71 feet MSL) for off-site Phibro-Tech well MW-3

NA = Not analyzed for this chemical
NS = Not sampled
< = Not detected at laboratory report limit listed
NE= Not Established
1.1 = Concentration detected exceeds MCL

TABLE 4
SUMMARY OF GROUND WATER TESTING RESULTS - METALS
11630 - 11700 Burke Street, Santa Fe Springs, CA 90670
(concentrations in milligrams per liter - mg/L)

Well	Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Total Chromium	Hexavalent Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
MW-1	10/05/95	<0.1	<0.1	0.38	<0.01	<0.02	0.06	NA	<0.03	<0.05	<0.12	<0.005	<0.05	<0.04	<0.1	<0.02	<0.16	0.07	0.09
	01/13/97	<0.1	<0.1	0.52	<0.01	<0.02	0.08	NA	<0.03	0.07	<0.12	<0.005	<0.05	<0.04	<0.1	<0.02	<0.16	0.13	0.15
	02/19/09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-2	01/13/97	<0.1	<0.1	0.44	<0.01	<0.02	0.09	NA	0.04	0.08	<0.12	<0.0005	<0.05	0.05	<0.1	<0.02	<0.16	0.14	0.19
	02/19/09	NA	NA	NA	NA	NA	<0.01	0.0039	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Ground water samples collected on January 13, 1997 were also analyzed on a filtered basis. No metals were detected in the filtered ground water samples

< = Not detected at laboratory reporting limit listed
NA = Not analyzed for this chemical
NS = Not sampled - well dry

TABLE 5
SOIL TESTING RESULTS - BEA REMEDIATION AUGUST 2006
11630 - 11700 Burke Street, Santa Fe Springs, CA 90670
(concentrations in milligrams per kilogram - mg/kg)

		(8015M)			(8260B)		(6010B/7471A)									
Sample ID	Date	TPH-G	TPH-D	TPH-O	Toluene	Xylenes	Arsenic	Barium	Total Chromium	Cobalt	Copper	Lead	Molybdenum	Nickel	Vanadium	Zinc
B-7@5'	08/16/06	<0.5	<5	<50	<0.002	<0.004	5.8	200	62	17	17	7.6	<2	29	105	80
B-7@10'	08/16/06	<0.5	<5	<50	<0.002	<0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-7@15'	08/16/06	<0.5	<5	<50	<0.002	<0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-7@18'	08/16/06	<0.5	<5	<50	<0.002	<0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-7West@5'	08/16/06	<0.5	<5	<50	<0.002	<0.004	4.7	170	53	14	15	6.4	<2	24	86	70
B-7West@10'	08/16/06	<0.5	<5	<50	<0.002	<0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-7West@15'	08/16/06	<0.5	<5	<50	<0.002	<0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-7West@18'	08/16/06	<0.5	<5	<50	<0.002	<0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-7East@5'	08/16/06	<0.5	<5	<50	<0.002	<0.004	5.8	163	46	11	17	6.1	<2	22	81	61
B-7East@10'	08/16/06	<0.5	<5	<50	<0.002	<0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-7East@15'	08/16/06	<0.5	<5	<50	<0.002	<0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-7East@20'	08/16/06	<0.5	<5	<50	<0.002	<0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E-9West@5'	08/17/06	<0.5	146	183	<0.002	<0.004	4	159	43	22	47	46	3.3	52	87	101
E-9West@10'	08/17/06	<0.5	5.2	<50	<0.002	<0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E-9WEst@15'	08/17/06	<0.5	<5	<50	<0.002	<0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E-9West@20'	08/17/06	<0.5	<5	<50	<0.002	<0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E-9Center@5'	08/17/06	<0.5	<5	<50	<0.002	<0.004	3.9	118	18	12	16	6.3	<2	17	77	54
E-9Center@10'	08/17/06	<0.5	8.8	<50	0.0046	0.0056	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E-9Center@15'	08/17/06	<0.5	<5	<50	<0.002	<0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E-9Center@20'	08/17/06	<0.5	<5	<50	<0.002	<0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E-9East@2'	08/17/06	<0.5	<5	<50	<0.002	<0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E-9East@5'	08/17/06	<0.5	84	30J	<0.002	<0.004	3.6	115	20	14	37	16	13	97	64	69
E-9East@10'	08/17/06	<0.5	<5	<50	<0.002	<0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E-9East@15'	08/17/06	<0.5	<5	<50	<0.002	<0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E-9East@20'	08/17/06	<0.5	<5	<50	<0.002	<0.004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 5
SOIL TESTING RESULTS - BEA REMEDIATION AUGUST 2006
11630 - 11700 Burke Street, Santa Fe Springs, CA 90670
(concentrations in milligrams per kilogram - mg/kg)

		(8015M)			(8260B)		(6010B/7471A)									
Sample ID	Date	TPH-G	TPH-D	TPH-O	Toluene	Xylenes	Arsenic	Barium	Total Chromium	Cobalt	Copper	Lead	Molybdenum	Nickel	Vanadium	Zinc
MAXIMUM		**ND**	**146**	**183**	**0.0046**	**0.0056**	**5.8**	**200**	**62**	**22**	**47**	**46**	**13**	**97**	**105**	**101**
SSL		500	1,000	10,000	0.45	5.25	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
SLCC-R		NE	NE	NE	5,000	600	0.39	15,000	120,000	23	3,100	400	390	1,600	390	23,000
SLCC-I		NE	NE	NE	46,000	2,600	1.6	190,000	150,000	300	41,000	800	5,100	20,000	5,200	310,000
CHHSL-R		NE	NE	NE	NE	NE	0.07	5,200	100,000	660	3,000	150	380	1,600	530	23,000
CHHSL-I		NE	NE	NE	NE	NE	0.24	63,000	100,000	3,200	38,000	3,500	4,800	16,000	6,700	100,000

Only those VOCs (including fuel oxygenates) and Title 22 Metals detected are listed
< = Not detected at laboratory reporting limit listed
NA = Not analyzed for this chemical
ND = Not detected. Detection limits ranged from 0.005 mg/kg to 0.05 mg/kg
NE = Not established
TPH-G = Total Petroleum Hydrocarbons as Gasoline
TPH-D = Total Petroleum Hydrocarbons as Diesel
TPH-O = Total Petroleum Hydrocarbons as Oil
SSL = Los Angeles RWQCB Soil Screening Levels - Guidance for VOC-Impacted Site (March 1996) and Petroleum-Impacted Sites (May 1996)
SLCC-R = EPA Region 9 - "Screening Level for Chemical Contaminants at Superfund Sites" - Residential Land Use (September 2008)
SLCC-I = EPA Region 9 - "Screening Level for Chemical Contaminants at Superfund Sites" - Commercial/Industrial Land Use (September 2008)
CHHSL-R = Cal-EPA - "California Human Health Screeing Levels in Evaluation of Contaminated Properties" - Residential Land Use (January 2005)
CHHSL-I = Cal-EPA - "California Human Health Screeing Levels in Evaluation of Contaminated Properties" - Commercial/Industrial Land Use (January 2005)
5.8 = Concentration detected exceeds SLCC-R, SLCC-I, CHHSL-R and CHHSL-I standards

TABLE 6
SOIL TESTING RESULTS - EA1 SUBSURFACE UNITS REMOVAL FEBRUARY 2009
11630-1170 Burke Street, Santa Fe Springs, CA 90670
(concentrations in milligrams per kilogram - mg/kg)

Original in Color

			(8015M)			(8260B)												(8270C)	(8082)	(6010B/7471A)											
Sample ID	Date	Subsurface Unit No.	TPH-G	TPH-D	TPH-O	Acetone	Ethyl-benzene	Isopropyl-benzene	Toluene	1,2,4-TMB	1,3,5-TMB	Total Xylenes	n-Butyl benzene	sec-Butyl benzene	n-Propyl benzene	Naphthalene	4-Isopropyl toluene	Bis(2-Ethylhexyl) Phthalate	All PCBs	Arsenic	Barium	Cadmium	Total Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Vanadium	Zinc
EXCAVATION SOIL SAMPLES																															
Sample 2@6'	02/10/09	3	<0.1	<10	<50	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.50	NA	3.92	160	<0.5	25.8	8.78	23.8	4.93	<0.01	<5.0	20.0	50.2	52.4
Sample 3@10'	02/10/09	3	<0.1	<10	<50	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.50	NA	2.85	176	<0.5	28.0	9.79	26.1	5.92	<0.01	<5.0	22.3	51.6	56.9
Sample 4@15'	02/10/09	3	12.4	4,940	7,100	0.071	<0.005	<0.005	<0.005	<0.005	<0.005	0.027	0.015	0.007	0.021	0.011		<0.50	NA	1.54	99.2	<0.5	14.5	4.82	15.6	2.46	<0.01	<5.0	12.3	28.5	38.3
Sample 5@5'	02/10/09	4 &5	<0.1	<10	<50	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.50	NA	0.870	144	<0.5	22.7	6.68	14.8	2.88	<0.01	<5.0	15.8	39.9	50.5
Sample 6@4'	02/10/09	4 &5	<0.1	<10	<50	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.50	NA	<0.3	177	<0.5	30.0	9.37	18.7	6.16	0.167	<5.0	20.2	52.4	56.8
Sample 7@4'	02/11/09	4 &5	<0.1	<10	<50	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.50	NA	<0.3	163	<0.5	25.2	8.20	17.4	5.00	<0.01	<5.0	17.2	47.4	49.8
Sample 8@9'	02/11/09	4 &5	<0.1	<10	<50	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.50	NA	<0.3	155	<0.5	28.0	8.81	23.2	5.87	<0.01	<5.0	20.2	52.2	54.6
Sample 9@4'	02/11/09	4 &5	<0.1	<10	<50	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.50	NA	<0.3	145	<0.5	26.1	8.22	16.1	4.71	<0.01	<5.0	16.7	47.6	53.2
Sample 10@9'	02/11/09	4 &5	<0.1	<10	<50	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.50	NA	<0.3	176	<0.5	28.9	9.06	26.4	6.27	<0.01	<5.0	21.4	54.7	57.9
Sample 11@4'	02/11/09	4 &5	<0.1	<10	<50	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.50	NA	<0.3	118	<0.5	20.0	6.52	14.3	3.67	<0.01	<5.0	13.9	37.2	46.1
		MAXIMUM	**12.4**	**4,940**	**7,100**	**0.071**	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**0.027**	**0.015**	**0.007**	**0.021**	**0.011**		**<0.50**	**NA**	**3.92**	**177**	**<0.5**	**30**	**9.79**	**26.4**	**6.27**	**0.167**	**0**	**22.3**	**54.7**	**57.9**
SEDIMENT																															
Sediment	02/11/09	4&5	<0.1	<10	<50	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.50	NA	<0.200	102	3.16	113	59.5	99.4	81.8	0.0099	<5.0	27.2	22.0	699
		MAXIMUM	**<0.1**	**<10**	**<50**	**<0.020**	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.005**	**<0.50**	**NA**	**<0.200**	**102**	**3.16**	**113**	**59.5**	**99.4**	**81.8**	**0.0099**	**<5.0**	**27.2**	**22.0**	**699**
STOCKPILE SOIL SAMPLES																															
ESP-1	01/28/09	--	<0.100	<10	<50	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.50	<0.01	4.27	193	<0.5	27.2	9.37	32.8	7.79	<0.01	<5.0	21.3	27.4	69.2
ESP-2	01/28/09	--	<0.100	<10	<50	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.552	<0.01	3.56	141	<0.5	21.3	7.69	26.2	6.06	<0.01	<5.0	15.8	37.7	59.2
Stockpile C	02/11/09	--	<0.100	<10	<50	<0.020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.50	<0.50	<0.3	157	<0.5	29.1	9.54	23.4	5.93	0.0668	<5.0	21.0	52.6	56.1
Stockpile D	02/11/09	--	527	7,960	8,000	<0.020	0.884	0.610	2.31	27.0	4.51	8.27	3.53	2.25	2.03	4.31	3.73	17.2	<0.50	<0.3	142	<0.5	224	9.91	973	41.8	0.167	13.0	25.7	31.3	215
		MAXIMUM	**527**	**7,960**	**8,000**	**0**	**0.884**	**0.610**	**2.31**	**27.0**	**4.51**	**8.27**	**3.53**	**2.25**	**2.03**	**4.31**	**3.73**	**17.2**	**<0.50**	**4.27**	**193**	**<0.5**	**224**	**9.91**	**973**	**41.8**	**0.167**	**13.0**	**25.7**	**52.6**	**215**
		SSL	500	1,000	10,000	NE	0.9	NE	0.45	NE	NE	5.25	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
		SLCC-R	NE	NE	NE	61,000	5.7	2,200	5,000	87	NE	600	NE	NE	NE	3.9	NE	35	0.17	0.39	15,000	70	120,000	23	3,100	400	23	390	1,600	390	23,000
		SLCC-I	NE	NE	NE	610,000	29	11,000	46,000	400	NE	2,600	NE	NE	NE	20	NE	120	0.62	1.6	190,000	810	150,000	300	41,000	800	310	5,100	20,000	5,200	310,000
		CHHSL-R	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	0.089	0.07	5,200	1.7	100,000	660	3,000	150	18	380	1,600	530	23,000
		CHHSL-I	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	0.30	0.24	63,000	7.5	100,000	3,200	38,000	3,500	180	4,800	16,000	6,700	100,000

Only those chemicals detected are listed
< = Not detected at laboratory reporting limit listed
ND = Not detected
NE = Not established
SSL = Los Angeles RWQCB Soil Screening Levels - Guidance for VOC-Impacted Sites (March 1996) and Petroleum-Impacted Sites (May 1996)
SLCC-R = EPA Region 9 - "Screening Level for Chemical Contaminants at Superfund Sites" - Residential Land Use (September 2008)
SLCC-I = EPA Region 9 - "Screening Level for Chemical Contaminants at Superfund Sites" - Commercial/Industrial Land Use (September 2008)
CHHSL-R = Cal-EPA - "California Human Health Screeing Levels in Evaluation of Contaminated Properties" - Residential Land Use (January 2005)
CHHSL-I = Cal-EPA - "California Human Health Screeing Levels in Evaluation of Contaminated Properties" - Commercial/Industrial Land Use (January 2005)
32 = Concentration detected exceeds SLCC-I, CHHSL-I or SSL standards
46.2 = Concentration detected exceeds SLCC-R or CHHSL-R standards, but is below SLCC-I and/or CHHSL-I standards

TABLE 7
SUMMARY OF WELL CONSTRUCTION DATA
11630 - 11700 Burke Street, Santa Fe Springs, CA 90670

Well	Date Completed	Installed By	Casing Diameter (inch)	Total Depth (feet bgs)	Screen Interval (feet bgs)	Slot Size (inch)	Well Elevation (feet MSL)
MW-1	10/03/95	EAI	2	53	33 - 53	0.020	152.83
MW-2	12/23/96	EAI	2	55	30 - 55	0.020	149.66

Note: Elevations for wells based on established elevation (151.71 feet MSL) for off-site Phibro-Tech well MW-3

TABLE 8
SOIL GAS TESTING RESULTS - VOCs EPA METHOD 8260B
11630 - 11700 Burke Street, Santa Fe Springs, CA 90670
(concentrations in micrograms per liter - ug/L)

Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Chloroform	CTC	TCE	PCE
A4@5'	02/23/09	0.26	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
A4@15'	02/23/09	0.15	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	2.9
A4@15' D	02/23/09	0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	2.4
A5@5'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
A5@15'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	2.4
B1@5'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	0.18
B1@5' D	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	0.10
B1@15'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	0.15	6.6
B2@5'	02/24/09	0.11	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	0.47
B2@15'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	0.36	12
B3@5'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	0.34
B3@15'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	0.59	14
B4@5'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	0.17
B4@15'	02/23/09	0.16	<1.0	<0.50	<0.50	<0.10	<0.10	0.59	9.4
B5@5'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	0.24
B5@15'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	0.56	9.3
B6@5'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
B6@15'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	0.41	5.4
C1@5'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	0.46
C1@15'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	0.12	7.9
C2@5'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	0.27
C2@15'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	0.35	5.8
C3@5'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	0.42
C3@15'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	2.3	16
C4@5'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
C4@15'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	0.75	4.6
C4@15' D	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	0.75	4.7
C5@5'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	0.19
C5@15'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	0.49	4.1
C6@5'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
C6@15'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	0.34	2.2
D1@5'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	0.19
D1@15'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	2.4

TABLE 8
SOIL GAS TESTING RESULTS - VOCs EPA METHOD 8260B
11630 - 11700 Burke Street, Santa Fe Springs, CA 90670
(concentrations in micrograms per liter - ug/L)

Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Chloroform	CTC	TCE	PCE
D2@5'	02/23/09	0.16	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
D2@15'	02/23/09	0.11	<1.0	<0.50	<0.50	<0.10	<0.10	0.36	6.1
D3@5'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
D3@15'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	3.7	9.9
D4@5'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	0.36
D4@15'	02/23/09	0.12	<1.0	<0.50	<0.50	<0.10	0.12	3.1	17
D5@5'	02/23/09	0.15	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
D5@15'	02/23/09	0.13	<1.0	<0.50	<0.50	<0.10	0.17	0.67	4.0
D6@5'	02/23/09	0.14	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
D6@15'	02/23/09	0.12	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	0.50
E1@5' (PV 1)	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	0.15
E1@5' (PV 3)	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	0.16
E1@5' (PV 7)	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	0.14
E1@15'	02/23/09	0.11	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	6.8
E2@5'	02/23/09	0.12	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
E2@15'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	0.16	6.0
E3@5'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
E3@15'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	0.88
E4@5'	02/23/09	0.18	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
E4@15'	02/23/09	<0.10	1.0	0.65	3.22	0.15	0.12	1.7	5.8
E5@5'	02/23/09	0.13	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
E5@15'	02/23/09	0.10	<1.0	<0.50	<0.50	0.13	<0.10	0.45	0.8

Only those volatile organic compounds detected are listed
< = Not detected at laboratory reporting limit listed
D = Duplicate sample
PV = Purge volume
CTC = Carbon Tetrachloride
TCE = Trichloroethene
PCE = Tetrachloroethene

TABLE 8
SOIL GAS TESTING RESULTS - VOCs EPA METHOD 8260B
11630 - 11700 Burke Street, Santa Fe Springs, CA 90670
(concentrations in micrograms per liter - ug/L)

Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Chloroform	CTC	TCE	PCE
SOIL SAMPLES COLLECTED FROM 5 FEET BGS									
A4@5'	02/23/09	**0.26**	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
A5@5'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
B1@5'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**0.18**
B1@5' D	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**0.10**
B2@5'	02/24/09	**0.11**	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**0.47**
B3@5'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**0.34**
B4@5'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**0.17**
B5@5'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**0.24**
B6@5'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
C1@5'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**0.46**
C2@5'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**0.27**
C3@5'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**0.42**
C4@5'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
C5@5'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**0.19**
C6@5'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
D1@5'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**0.19**
D2@5'	02/23/09	**0.16**	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
D3@5'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
D4@5'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**0.36**
D5@5'	02/23/09	**0.15**	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
D6@5'	02/23/09	**0.14**	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
E1@5' (PV 1)	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**0.15**
E1@5' (PV 3)	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**0.16**
E1@5' (PV 7)	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**0.14**
E2@5'	02/23/09	**0.12**	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
E3@5'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
E4@5'	02/23/09	**0.18**	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
E5@5'	02/23/09	**0.13**	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	<0.10
No. Samples Analyzed		28	28	28	28	28	28	28	28
No. Detections		8	0	0	0	0	0	0	15
Percentage Detections		29	0	0	0	0	0	0	54
Maximum		**0.26**	**<1.0**	**<0.50**	**<0.50**	**<0.10**	**<0.10**	**<0.10**	**0.47**

0.122 0.603

TABLE 8
SOIL GAS TESTING RESULTS - VOCs EPA METHOD 8260B
11630 - 11700 Burke Street, Santa Fe Springs, CA 90670
(concentrations in micrograms per liter - ug/L)

Sample ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes	Chloroform	CTC	TCE	PCE
SOIL SAMPLES COLLECTED FROM 15 FEET BGS									
A4@15'	02/23/09	**0.15**	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**2.9**
A4@15' D	02/23/09	**0.10**	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**2.4**
A5@15'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**2.4**
B1@15'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	**0.15**	**6.6**
B2@15'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	**0.36**	**12**
B3@15'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	**0.59**	**14**
B4@15'	02/23/09	**0.16**	<1.0	<0.50	<0.50	<0.10	<0.10	**0.59**	**9.4**
B5@15'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	**0.56**	**9.3**
B6@15'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	**0.41**	**5.4**
C1@15'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	**0.12**	**7.9**
C2@15'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	**0.35**	**5.8**
C3@15'	02/24/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	**2.3**	**16**
C4@15'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	**0.75**	**4.6**
C4@15' D	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	**0.75**	**4.7**
C5@15'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	**0.49**	**4.1**
C6@15'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	**0.34**	**2.2**
D1@15'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**2.4**
D2@15'	02/23/09	**0.11**	<1.0	<0.50	<0.50	<0.10	<0.10	**0.36**	**6.1**
D3@15'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	**3.7**	**9.9**
D4@15'	02/23/09	**0.12**	<1.0	<0.50	<0.50	<0.10	**0.12**	**3.1**	**17**
D5@15'	02/23/09	**0.13**	<1.0	<0.50	<0.50	<0.10	**0.17**	**0.67**	**4.0**
D6@15'	02/23/09	**0.12**	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**0.50**
E1@15'	02/23/09	**0.11**	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**6.8**
E2@15'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	**0.16**	**6.0**
E3@15'	02/23/09	<0.10	<1.0	<0.50	<0.50	<0.10	<0.10	<0.10	**0.88**
E4@15'	02/23/09	<0.10	**1.0**	**0.65**	**3.22**	**0.15**	**0.12**	**1.7**	**5.8**
E5@15'	02/23/09	**0.10**	<1.0	<0.50	<0.50	**0.13**	<0.10	**0.45**	**0.8**
No. Samples Analyzed		27	27	27	27	27	27	27	27
No. Detections		9	1	1	1	2	3	20	27
Percentage Detections		33	4	4	4	7	11	74	100
Maximum		**0.16**	**1.0**	**0.65**	**3.22**	**0.15**	**0.17**	**3.7**	**17**

TABLE 9
SOIL GAS TESTING RESULTS - VOCs EPA METHOD TO-15
11630 - 11700 Burke Street, Santa Fe Springs, CA 90670
(concentrations in micrograms per liter - ug/L)

Chemical			E3@5'	D6@15'	Trip Blank
Propene			0.230	0.021	<0.010
Trichlorofluoromethane			<0.005	0.011	<0.005
Acetone			0.32	0.550	<0.020
1,1-Dichloroethene			<0.005	0.0059	<0.005
Carbon Disulfide			0.036	0.001	<0.005
1,1-Dichloroethane			<0.005	0.0058	<0.005
2-Butanone (MEK)			0.023	0.0091	<0.005
Chloroform			<0.005	0.024	<0.005
Benzene			0.0061	0.0058	<0.005
Carbon Tetrachloride			<0.005	0.037	<0.005
TCE	1.77	✓	0.016	0.054	<0.005
Toluene	378	✓	0.057	0.051	<0.005
PCE	0.683	✓	0.140	0.240	<0.005
Chlorobenzene			0.009	<0.005	<0.005
Ethylbenzene	NA		0.015	0.011	<0.005
Xylenes	687	✓	0.077	0.063	<0.005
1,2,4-Trimethylbenzene			0.017	0.0094	<0.005
1,3,5-Trimethylbenzene			0.0058	<0.005	<0.005

Only those volatile organic compounds detected are listed
< = Not detected at laboratory reporting limit listed

TABLE 10
SUMMARY OF VOCs IN GROUND WATER BENEATH PILOT CHEMICAL AND PHIBRO-TECH, INC. SITES
(concentrations in micrograms per liter - ug/L)

Well	Date	Chloroform	CTC	1,1-DCA	1,2-DCA	1,1-DCE	TCE	PCE	Benzene	Toluene	Ethylbenzene	Xylenes
Pilot Chemical Company												
MW-1	Apr-08	209J	ND	ND	387	ND	ND	ND	ND	34,600	11,700	67,000
MW-2	Apr-08	450	ND	ND	3,160	ND	ND	ND	ND	62,500	9,000	44,900
MW-3	Apr-08	89.9	ND	ND	46.5J	ND	ND	ND	ND	4,280	2,780	8,240
MW-4	Apr-08	ND	ND	ND	1.90	ND	1.40	0.57	ND	ND	ND	ND
MW-5	Apr-08	25.5	36.5	ND	ND	0.288J	1.00	7.00	ND	ND	ND	ND
MW-6	Apr-08	15.9	14.1	ND	3.51	0.216J	1.23	3.67	ND	ND	ND	ND
MW-7	Apr-08	1.70	0.43J	ND	16.6	ND	1.40	0.90	ND	ND	ND	ND
MW-8	Apr-08	9.90	ND	ND	ND	ND	ND	1.40	ND	ND	ND	3.30
MW-9	Apr-08	13.7	ND	67	9.6	4.8	167	3.00	ND	ND	ND	ND
MW-10	Apr-08	19.5J	ND	ND	2,590	4.8	ND	ND	243	ND	ND	604
MW-11	Apr-08	1.8	0.065J	0.104J	1.80	0.067J	2.60	18.1	ND	ND	ND	ND
MAXIMUM		**450**	**36.5**	**67**	**3,160**	**4.8**	**167**	**18.1**	**243**	**62,500**	**11,700**	**67,000**
Phibro-Tech, Inc.												
MW-01D	Jul-08	ND	ND	ND	ND	2.40	34	ND	ND	ND	ND	ND
MW-01S	Jul-08	ND	ND	ND	ND	ND	6.70	4.50	ND	ND	ND	ND
MW-03	Jul-08	34	16	35	62	26	180	ND	ND	ND	730	88
MW-04	Jul-08	29	5.5	150	180		310	ND	ND	ND	ND	ND
MW-04A	Jul-08	5.50	ND	110	ND	9.70	68	1.90	ND	ND	ND	ND
MW-06B	Jul-08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-06D	Jul-08	ND	ND	ND	ND	1.40	28	13	ND	ND	ND	ND
MW-07	Jul-08	ND	ND	6.60	0.53	1.10	10	2.60	ND	ND	ND	ND
MW-09	Jul-08	35	ND	78	21	24	110	6.50	ND	ND	ND	ND
MW-11	Jul-08	ND	ND	41	220	14	220	ND	ND	ND	500	ND
MW-14S	Jul-08	30	4.00	120	65	65	640	ND	ND	ND	ND	ND
MW-15D	Jul-08	ND	ND	ND	ND	ND	ND	1.60	ND	ND	ND	ND
MW-15S	Jul-08	5.40	ND	18	110	5.90	73	2.30	ND	ND	ND	ND
MW-16	Jul-08	ND	ND	88	3.60	12.00	26	2.40	ND	ND	ND	ND
MAXIMUM		**35**	**16**	**150**	**220**	**65**	**640**	**13**	**ND**	**ND**	**730**	**88**

ND = Not detected
CTC = Carbon tetrachloride
1,1-DCA = 1,1-Dichloroethane
1,2-DCA = 1,2-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
TCE = Trichloroethene
PCE = Tetrachloroethene

XL:1576:OFFSITE-GW

TABLE 11
TOXICITY CRITERIA - HUMAN HEALTH SCREENING EVALUATION
11630 - 11700 Burke Street, Santa Fe Springs, CA 90670

Chemicals of Concern	Chronic Inhalation Reference Dose mg/m^3	Inhalation Cancer Slope Factor $(ug/m^3)^{-1}$
Benzene	3.0E-02	2.9E-05
Toluene	3.0E-01	NC
Ethylbenzene	1.0E+00	2.5E-03
Xylenes	1.0E-01	NC
1,3,5-Trimethylbenzene (1,3,5TMB)	6.0E-03	NC
1,2,4-Trimethylbenzene (1,2,4TMB)	6.0E-03	NC
Propene	3.0E+00	NC
Trichlorofluoromethane	7.0E-01	NC
Acetone	3.5E-01	NC
Carbon Disulfide	8.0E-01	NC
2-Butanone (MEK)	4.9E+00	NC
1,1-Dichloroethane (1,1-DCA)	5.0E-01	1.6E-06
1,1-Dichloroethene (1,1-DCE)	7.0E-02	NC
Chlorobenzene	1.0E+00	NC
Chloroform	3.0E-01	5.3E-06
Carbon Tetrachloride	4.0E-02	4.2E-05
Trichloroethlene (TCE)	6.0E-01	2.0E-06
Tetrachloroethene (PCE)	3.5E-02	5.9E-06

All values from DTSC's Screening Model Lookup Tables except Propene and Inhalation Slope Factor for Ethylbenzene from OEHHA Toxicity Database
NC = Not a carcinogen

TABLE 12
VAPOR INTRUSION HEALTH RISK EVALUATION USING SOIL GAS DATA
(MAXIMUM CONCENTRATIONS DETECTED) FROM 5 FEET
11630 - 11700 Burke Street, Santa Fe Springs, CA 90670

Chemical	Maximum Concentration Detected (ug/m^3)	Residential Land Use		Commercial Land Use	
		Cancer Risk	Hazard Quotient	Cancer Risk	Hazard Quotient
Benzene	260	2.9E-06	7.3E-03	1.7E-06	4.6E-03
Toluene	57	NC	1.7E-04	NC	9.9E-05
Ethylbenzene	15	1.3E-08	1.2E-05	7.6E-09	7.1E-06
Xylenes	77	NC	6.8E-04	NC	4.0E-04
1,3,5-Trimethylbenzene (1,3,5-TMB)	5.8	NC	6.7E-04	NC	4.0E-04
1,2,4-Trimethylbenzene (1,2,4-TMB)	17	NC	2.0E-03	NC	1.3E-03
Propene	230	Not in Database		Not in Database	
Acetone	320	NC	1.1E-03	NC	6.6E-04
Carbon Disulfide	36	NC	5.5E-05	NC	3.0E-05
2-Butanone (MEK)	23	NC	3.9E-06	NC	2.3E-06
Chlorobenzene	9.0	NC	7.0E-06	NC	4.2E-06
Trichloroethlene (TCE)	16	1.1E-08	2.2E-05	6.7E-09	1.3E-05
Tetrachloroethene (PCE)	470	9.2E-07	2.7E-03	5.5E-07	6.2E-03
Total Value		**3.8E-06**	**1.5E-02**	**2.3E-06**	**1.4E-02**

NC= Not a Carcinogen

TABLE 13
VAPOR INTRUSION HEALTH RISK EVALUATION USING SOIL GAS DATA
(MAXIMUM CONCENTRATIONS DETECTED) FROM 15 FEET
11630 - 11700 Burke Street, Santa Fe Springs, CA 90670

Chemical	Maximum Concentration Detected (ug/m^3)	Residential Land Use		Commercial Land Use	
		Cancer Risk	Hazard Quotient	Cancer Risk	Hazard Quotient
Benzene	160	7.4E-07	2.0E-03	4.4E-07	1.2E-03
Toluene	1,000	NC	1.2E-03	NC	7.3E-04
Ethylbenzene	650	2.3E-07	2.1E-04	1.3E-07	1.3E-04
Xylenes	3,220	NC	1.2E-02	NC	7.0E-03
1,2,4-Trimethylbenzene (1,2,4-TMB)	9.4	NC	4.2E-04	NC	2.5E-04
Propene	21	Not in Database		Not in Database	
Trichlorofluoromethane	11	NC	5.8E-06	NC	3.4E-06
Acetone	550	NC	7.8E-04	NC	4.6E-04
Carbon Disulfide	1.0	NC	6.1E-07	NC	3.6E-07
2-Butanone (MEK)	9.1	NC	3.8E-07	NC	6.3E-07
1,1-Dichloroethane (1,1-DCA)	5.8	1.3E-09	3.7E-06	7.6E-10	2.2E-06
1,1-Dichloroethene (1,1-DCE)	5.9	NC	3.2E-05	NC	1.9E-05
Chloroform	150	NC	2.1E-04	NC	1.3E-04
Carbon Tetrachloride	170	1.0E-06	1.4E-03	6.1E-07	8.5E-04
Trichloroethlene (TCE)	3,700	1.1E-06	2.1E-03	6.4E-07	1.2E-03
Tetrachloroethene (PCE)	17,000	1.3E-05	1.5E-01	8.0E-06	9.0E-02
	Total Value	**1.6E-05**	**1.7E-01**	**9.8E-06**	**1.0E-01**

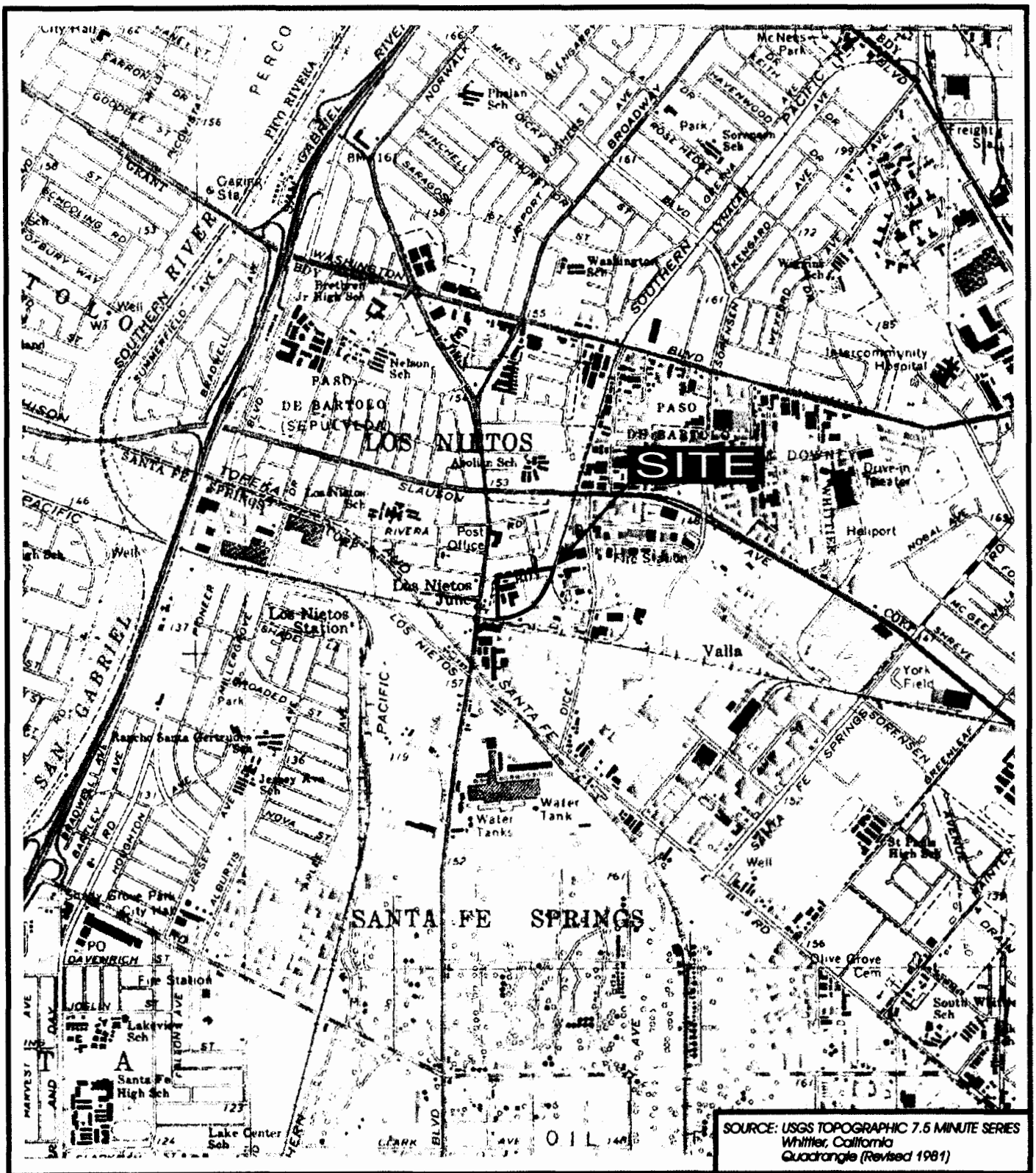
NC = Not a Carcinogen

TABLE 14
VAPOR INTRUSION HEALTH RISK EVALUATION USING SOIL GAS DATA
(95% UCL FOR PCE AND MAXIMUM CONCENTRATIONS DETECTED) FROM 15 FEET
11630 - 11700 Burke Street, Santa Fe Springs, CA 90670

Chemical/Depth	Maximum Concentration Detected (ug/m^3)	Residential Land Use		Commercial Land Use	
		Cancer Risk	Hazard Quotient	Cancer Risk	Hazard Quotient
Benzene	160	7.4E-07	2.0E-03	4.4E-07	1.2E-03
Toluene	1,000	NC	1.2E-03	NC	7.3E-04
Ethylbenzene	650	2.3E-07	2.1E-04	1.3E-07	1.3E-04
Xylenes	3,220	NC	1.2E-02	NC	7.0E-03
1,2,4-Trimethylbenzene (1,2,4-TMB)	9.4	NC	4.2E-04	NC	2.5E-04
Propene	21	Not in Database		Not in Database	
Trichlorofluoromethane	11	NC	5.8E-06	NC	3.4E-06
Acetone	550	NC	7.8E-04	NC	4.6E-04
Carbon Disulfide	1.0	NC	6.1E-07	NC	3.6E-07
2-Butanone (MEK)	9.1	NC	3.8E-07	NC	6.3E-07
1,1-Dichloroethane (1,1-DCA)	5.8	1.3E-09	3.7E-06	7.6E-10	2.2E-06
1,1-Dichloroethene (1,1-DCE)	5.9	NC	3.2E-05	NC	1.9E-05
Chloroform	150	NC	2.1E-04	NC	1.3E-04
Carbon Tetrachloride	170	1.0E-06	1.4E-03	6.1E-07	8.5E-04
Trichloroethlene (TCE)	3,700	1.1E-06	2.1E-03	6.4E-07	1.2E-03
Tetrachloroethene (PCE) (1)	8,123	6.4E-06	7.2E-02	3.8E-06	4.3E-02
Total Value		**9.5E-06**	**9.2E-02**	**5.6E-06**	**5.5E-02**

NC = Not a Carcinogen
(1) = 95% UCL Concentration

FIGURES



Environmental Audit, Inc.

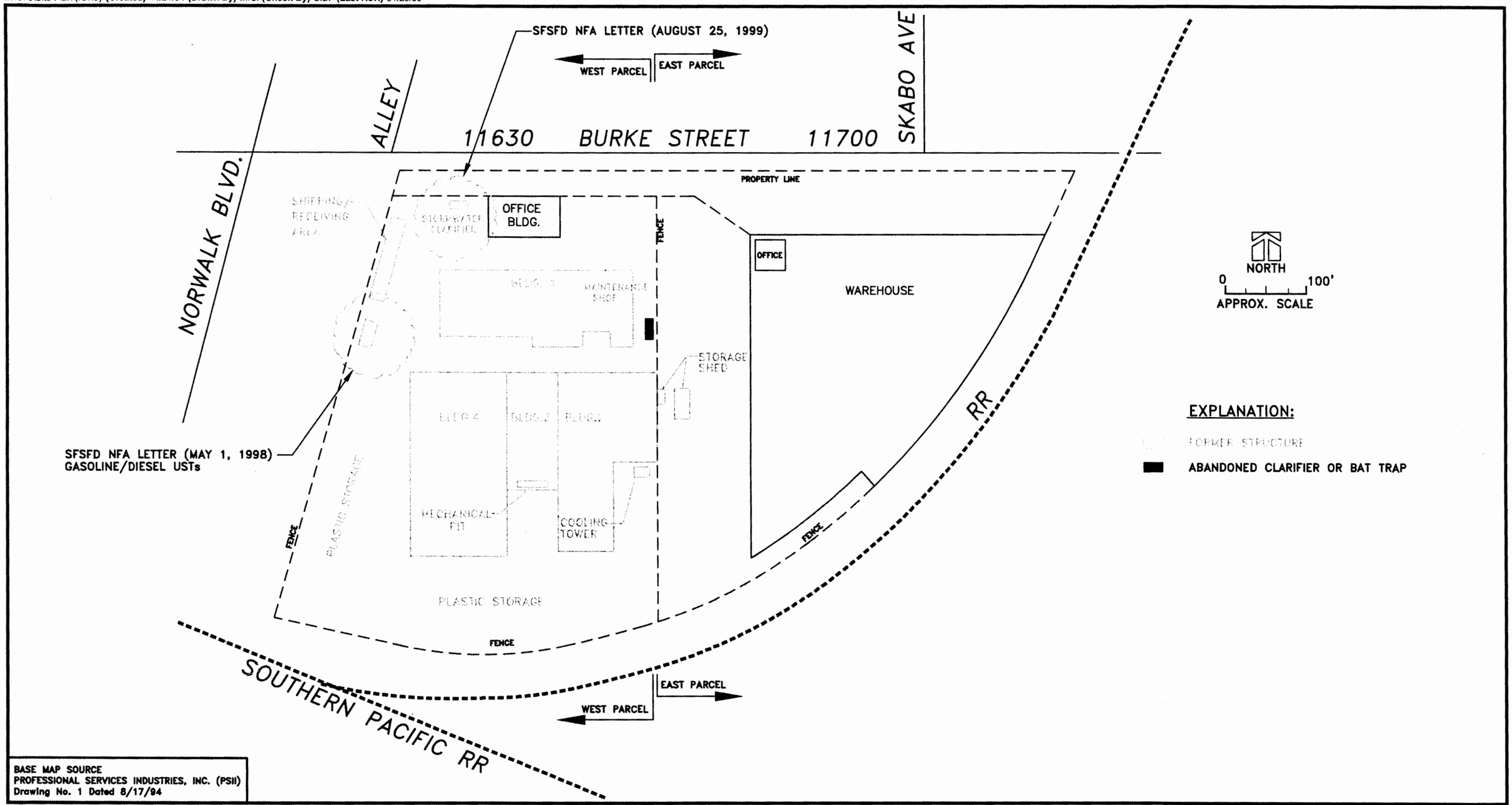
SITE LOCATION MAP
11630 - 11700 Burke Street
Santa Fe Springs, CA 90670

Project No. 1576

Figure 1

N:\1576\SiteLocMap.cdr

I:\1576\Site Plan (rev.5) **(Created)** 11/21/94 **(Drawn By)** M.C. **(Check By)** S.B. **(Last Rev.)** 01/20/09



BASE MAP SOURCE
PROFESSIONAL SERVICES INDUSTRIES, INC. (PSII)
Drawing No. 1 Dated 8/17/94

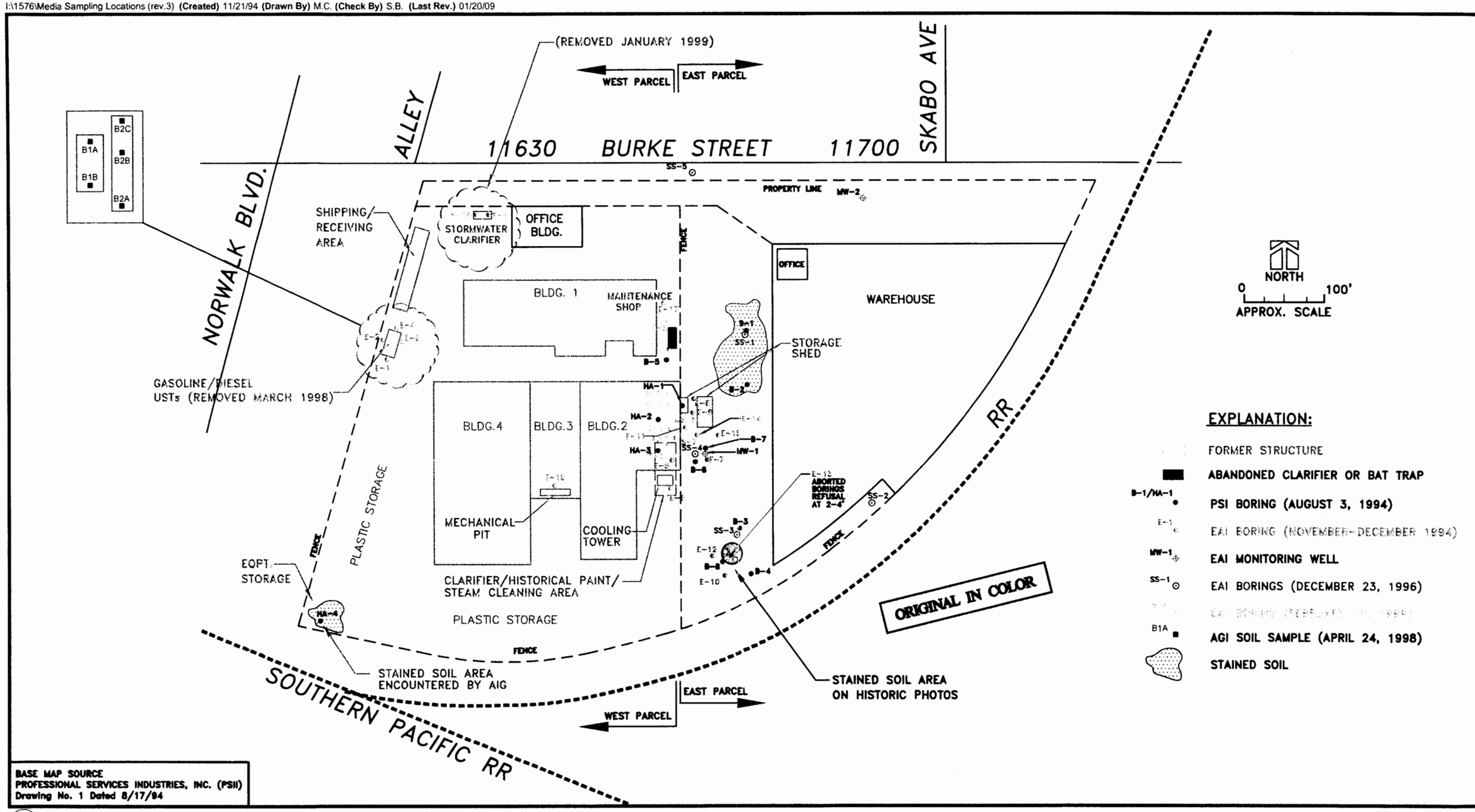
Environmental Audit, Inc.

SITE PLAN
11630 - 11700 Burke Street
Santa Fe Springs, CA 90670

Project No. 1576

Figure 2

I:\1576\Media Sampling Locations (rev.3) **(Created)** 11/21/94 **(Drawn By)** M.C. **(Check By)** S.B. **(Last Rev.)** 01/20/09



BASE MAP SOURCE
PROFESSIONAL SERVICES INDUSTRIES, INC. (PSII)
Drawing No. 1 Dated 8/17/94

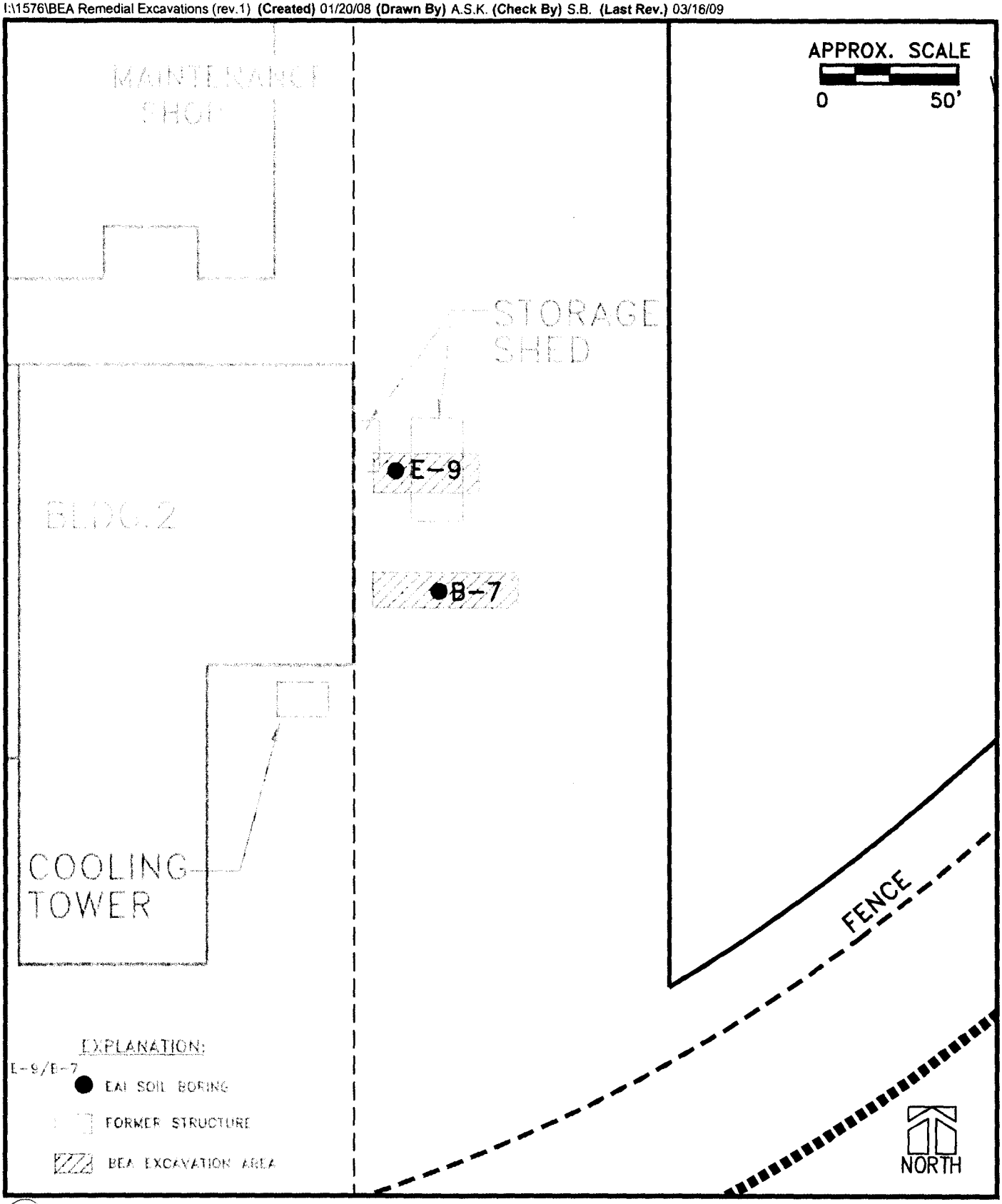
Environmental Audit, Inc.

HISTORICAL MEDIA SAMPLING LOCATIONS
11630 - 11700 Burke Street
Santa Fe Springs, CA 90670

Project No. 1576

Figure 3

I:\1576\BEA Remedial Excavations (rev.1) **(Created)** 01/20/08 **(Drawn By)** A.S.K. **(Check By)** S.B. **(Last Rev.)** 03/16/09



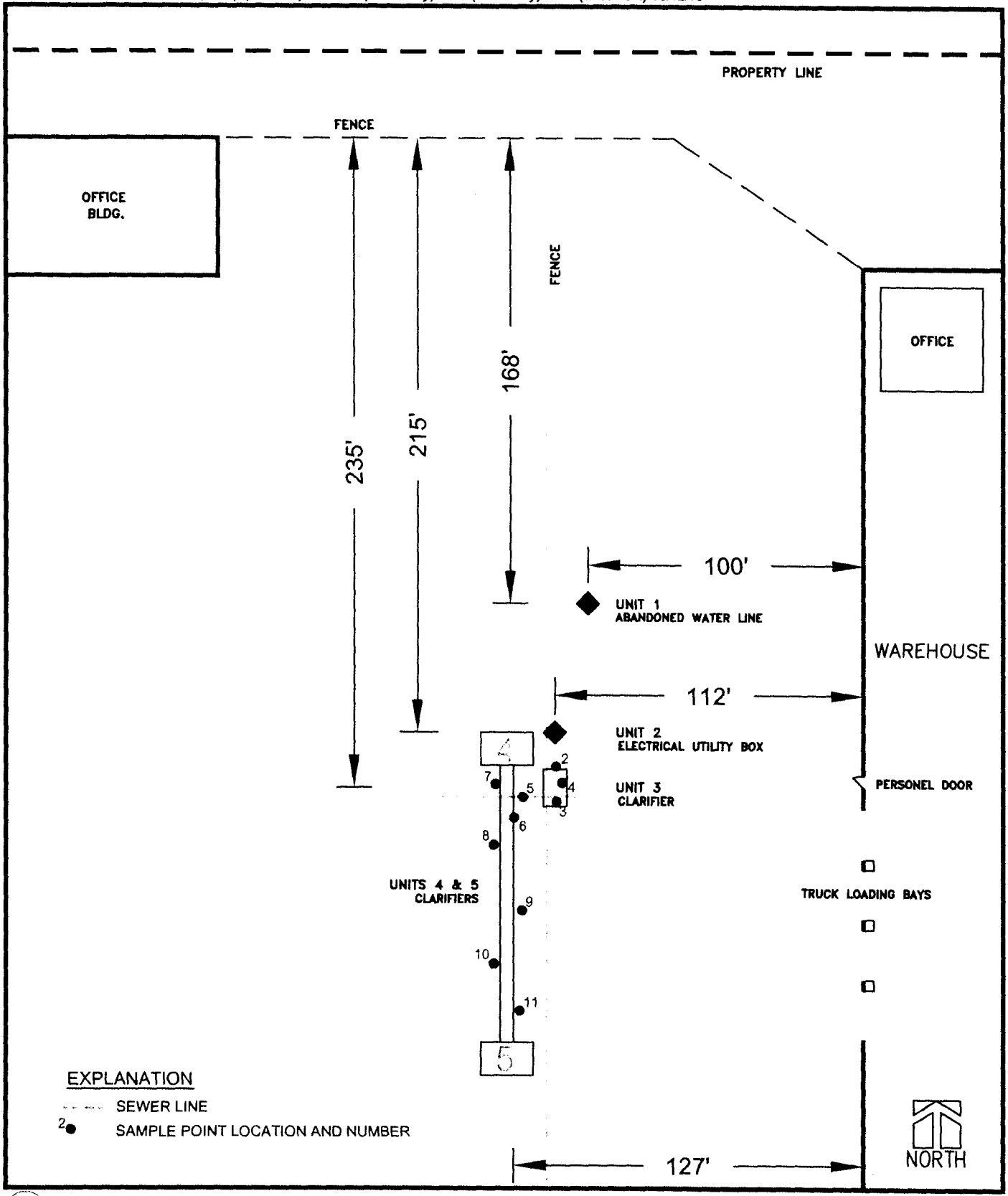
Environmental Audit, Inc.

BEA REMEDIAL EXCAVATIONS - AUGUST 2006
11630 - 11700 Burke Street
Santa Fe Springs, CA 90670

Project No. 1576

Figure 4

I:\1576\Subsurface Units Closed (rev.5) **(Created)** 11/21/94 **(Drawn By)** M.C. **(Check By)** S.B. **(Last Rev.)** 03/12/09



Environmental Audit, Inc.

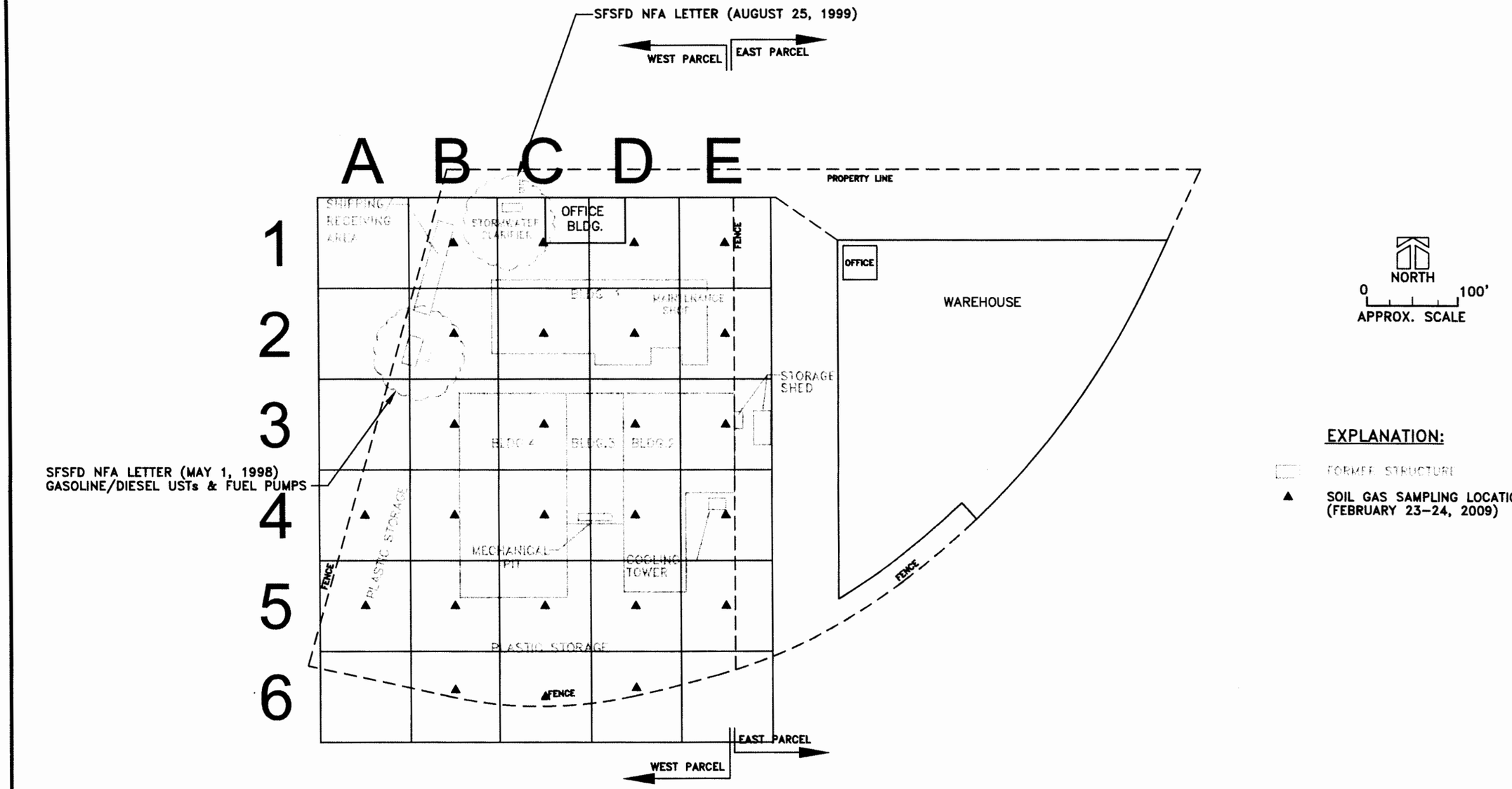
APPROX.SCALE
0 50'

SUBSURFACE UNITS CLOSED IN FEBRUARY 2009
11630 - 11700 Burke Street
Santa Fe Springs, CA 90670

Project No. 1576

Figure 5

I:\1576\Soil Gas Sampling Locations (rev.1) **(Created)** 11/21/94 **(Drawn By)** M.C. **(Check By)** S.B. **(Last Rev.)** 03/05/09



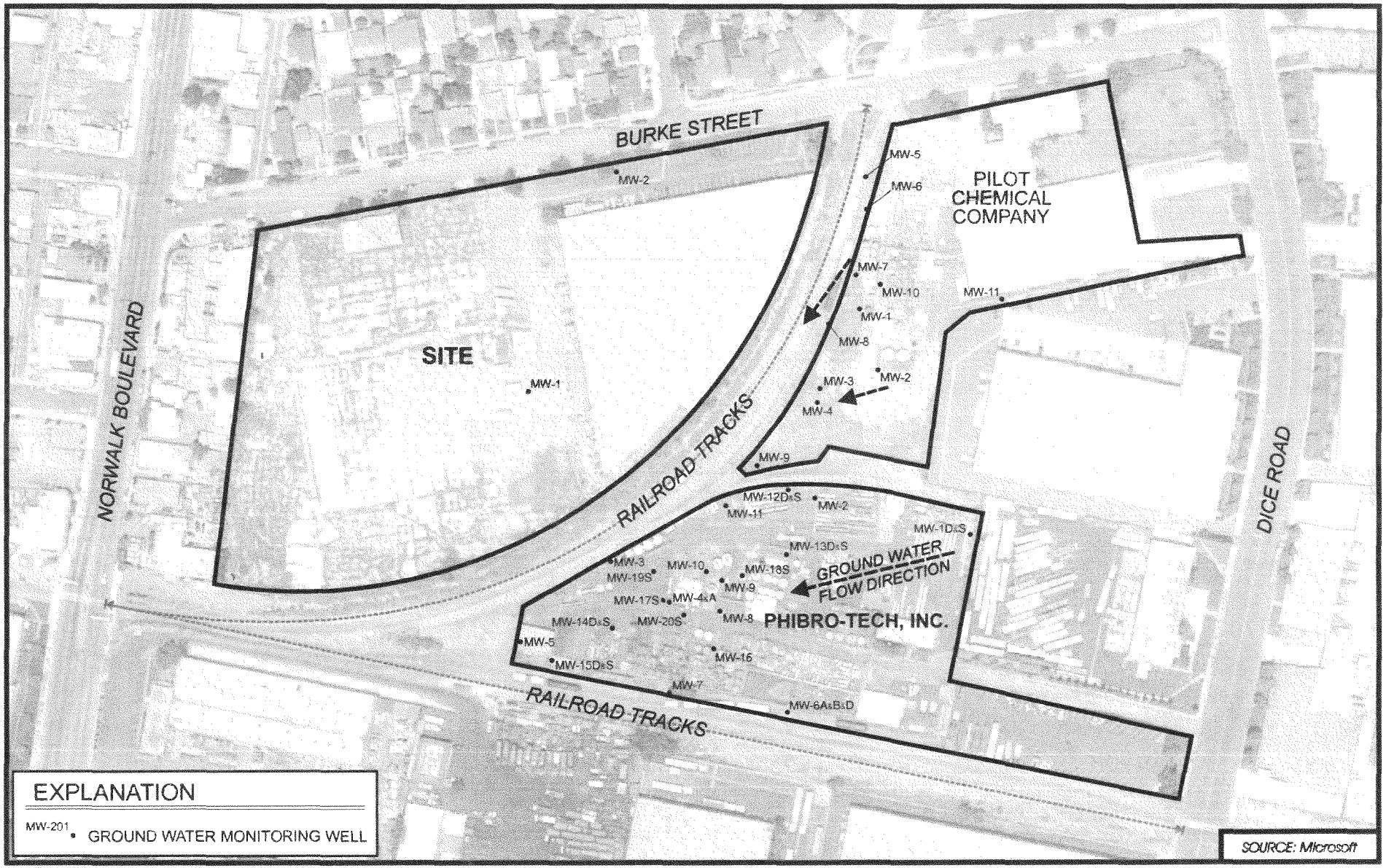
BASE MAP SOURCE
PROFESSIONAL SERVICES INDUSTRIES, INC. (PSII)
Drawing No. 1 Dated 8/17/94

Environmental Audit, Inc.

SOIL GAS SAMPLING LOCATIONS
11630 - 11700 Burke Street
Santa Fe Springs, CA 90670

Project No. 1576

Figure 6



ENVIRONMENTAL AUDIT, INC.

AERIAL VICINITY MAP
11630 to 11700 Burke Street
Santa Fe Springs, CA 90609

Project No. 1576

Figure 7

N:\1576\AerialVicinityMap(rev.1).cdr

ENVIRONMENTAL AUDIT, INC.

N

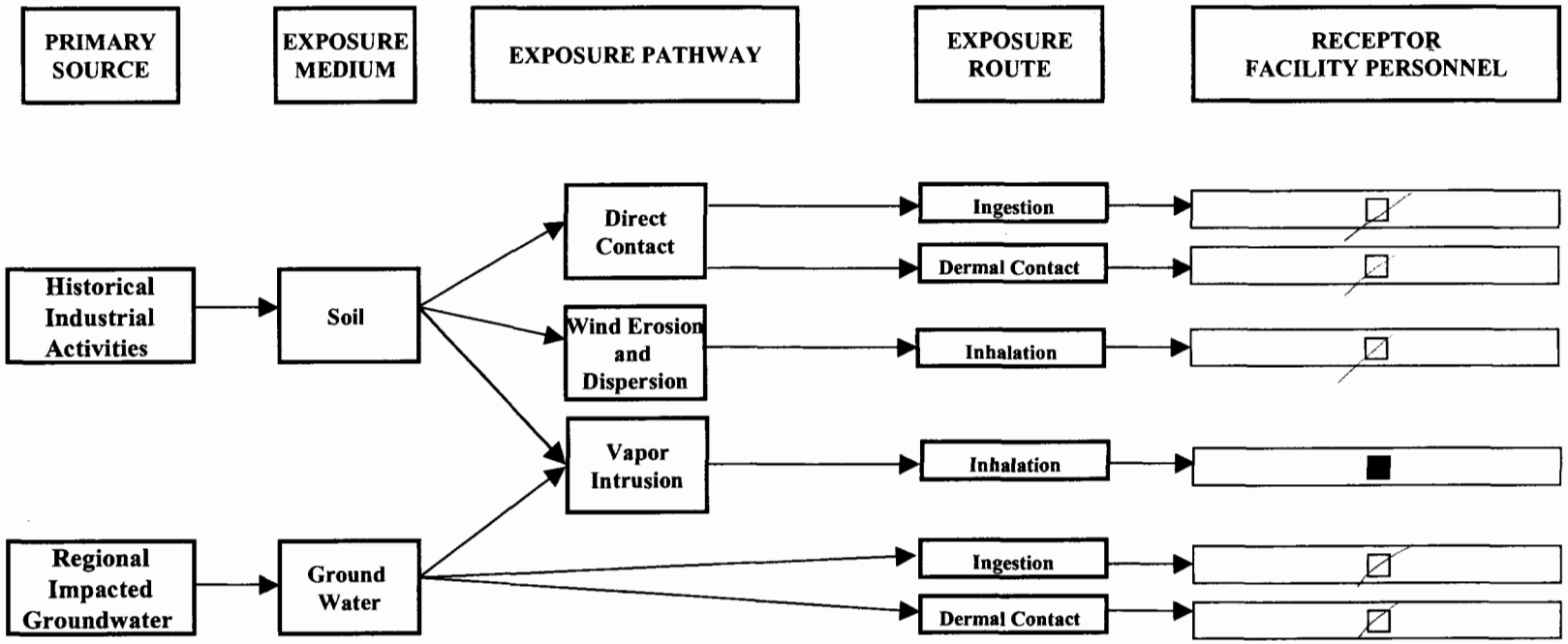
CENTRAL BASIN GROUNDWATER PCE PLUME

Project No. 1576
N:\1576\Plume\Plume.cdr

Figure 8
ORIGINAL IN COLOR

SITE CONCEPTUAL MODEL

11630 - 11700 Burke Street, Santa Fe Springs, CA 90670



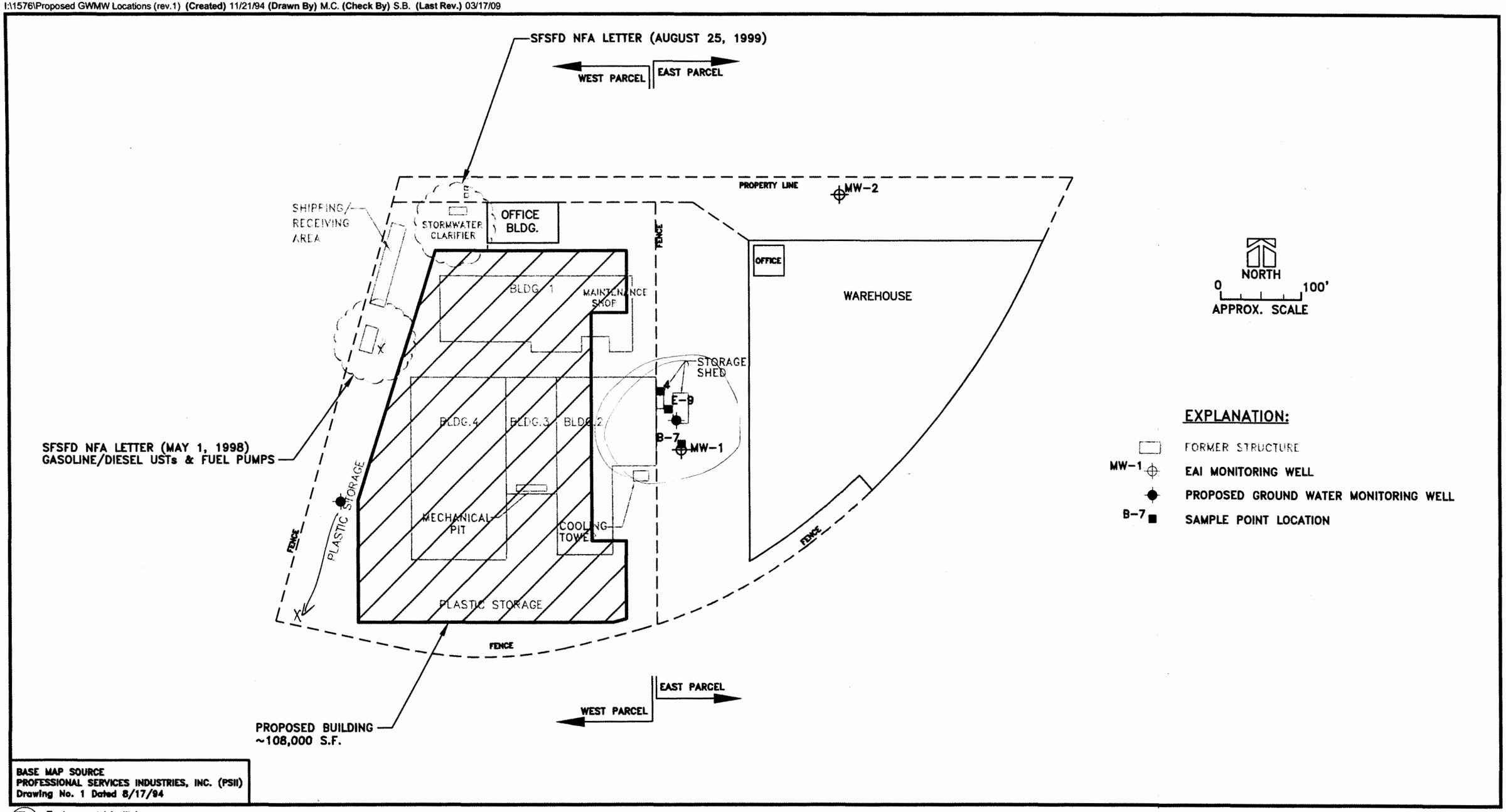
■ PATHWAY IS CONSIDERED TO BE POTENTIALLLY COMPLETE

□ PATHWAY IS CONSIDERED TO BE INCOMPLETE

FIGURE 9

N:1576\SCM(PP)

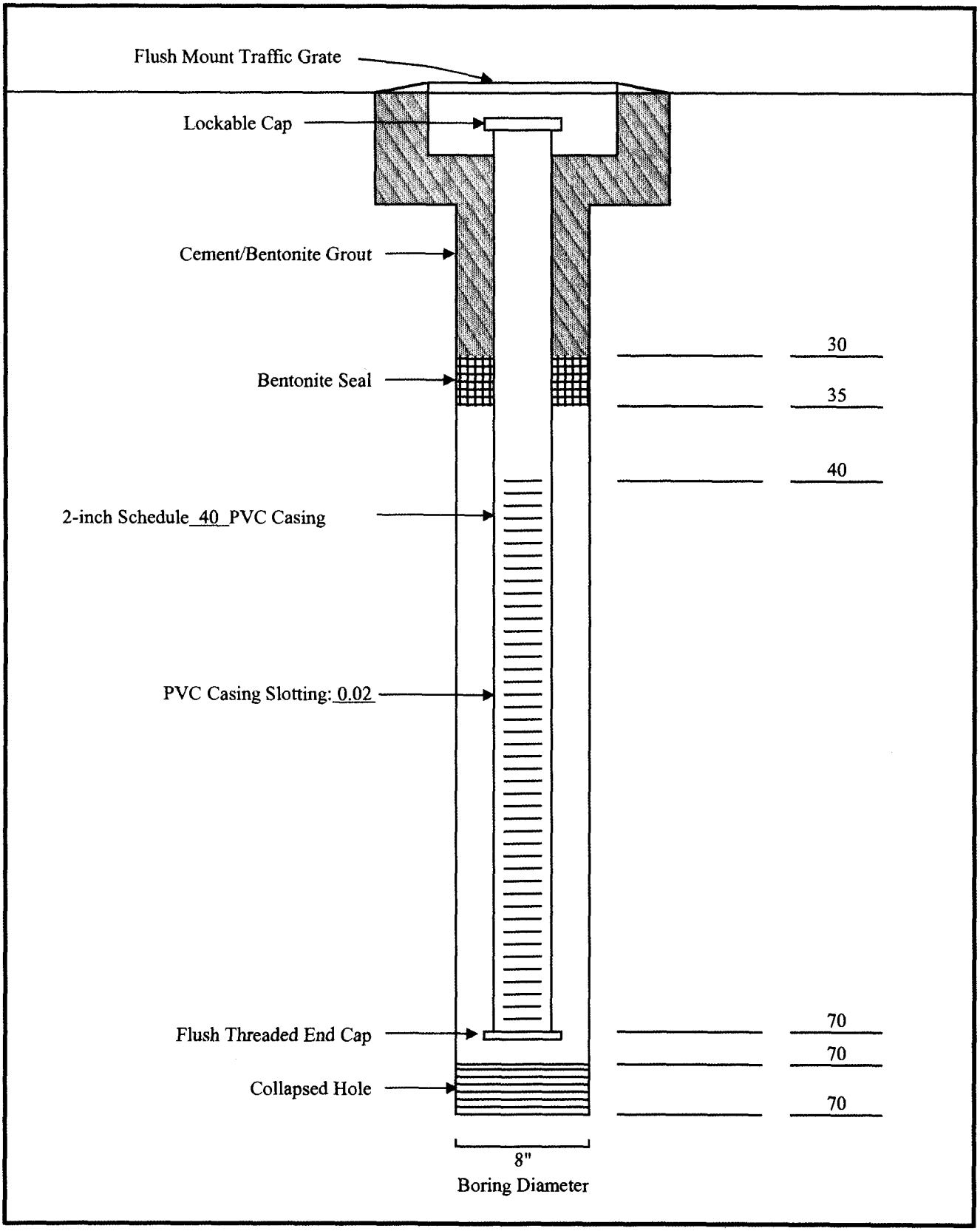
I:\1576\Proposed GWMW Locations (rev.1) **(Created)** 11/21/94 **(Drawn By)** M.C. **(Check By)** S.B. **(Last Rev.)** 03/17/09



BASE MAP SOURCE
PROFESSIONAL SERVICES INDUSTRIES, INC. (PSII)
Drawing No. 1 Dated 8/17/94

Environmental Audit, Inc.

PROPOSED GROUND WATER MONITORING WELL LOCATIONS
11630 - 11700 Burke Street
Santa Fe Springs, CA 90670



PROPOSED GROUND WATER MONITORING WELL CONSTRUCTION DETAILS

11630 - 11700 Burke Street, Santa Fe Springs, CA 90670

EAI Project No. 1576

Figure 11

APPENDIX A

Ground Water Sampling Logs

GROUND WATER SAMPLING LOG

Environmental Audit, Inc. ®
Planning, Environmental Analysis and Hazardous Substances Management and Remediation
1000 ORTEGA WAY, SUITE A (714) 632-8521
PLACENTIA, CA 92870-7125 FAX (714) 632-6754

DATE:	2-19-09
PROJECT NO.:	1576
CLIENT:	Burke St
WELL NO.:	MW-2
WELL DIAMETER (INCHES):	2"
SAMPLED BY:	BHM

WELL PURGING INFORMATION

ONE CASING VOLUME OF WATER CALCULATED USING THE FOLLOWING:

TOTAL DEPTH OF WELL (ft)		DEPTH TO WATER (ft bgs)		DEPTH TO FREE PRODUCT (ft. bgs)
55	—	39.70	—	—

WELL VOLUME FACTORS	
WELL CASING ID (INCHES)	VOLUME FACTOR
2.0	0.16
4.0	0.65
6.0	1.47

15.30 (WELL VOLUME FACTOR) X 0.16 (WELL VOLUME FACTOR) = 2.45 (ONE CASING VOLUME OF WATER (GALLONS))

PURGE TIME (hrs): START 11:50 FINISH 11:58

METHOD: DOWN HOLE PUMP [X] DEDICATED PUMP [ ] BAILER [ ] OTHER [ ]

TYPE/MODEL: Grund Fos

GALLONS PURGED	TEMP (°F)	CONDUCTIVITY (µS/cm)	pH	TURBIDITY (NTU)	REMARKS
2	72.8	3284	8.06	>1100	160 HTZ
					Purged 3 gal

WELL SAMPLING INFORMATION

TIME SAMPLED (hrs): 12:35

METHOD: DOWN HOLE PUMP [ ] DEDICATED PUMP [ ] BAILER [X] OTHER [ ]

TYPE/MODEL: Voss Technologies

COMMENTS: _____

APPENDIX B

Chain of Custody Records and Laboratory Reports

Environmental Audit, Inc. ®

Planning, Environmental Analysis and Hazardous
Substances Management and Remediation
1000 ORTEGA WAY, SUITE A (714) 632-8521
PLACENTIA, CA 92870-7162 FAX (714) 632-6754

Chain of Custody Record

SAMPLING REQUIREMENTS: RCRA ☐ NPDES ☐ SDWA ☐ _____ ☐

WRITTEN QC REPORT TURNAROUND TIME:

ROUTINE QC ☒

RWQCB QC ☐ SAME DAY ☐ 24hr ☐ 48 hr ☐ NORMAL ☒

PROJECT NO.	PROJECT NAME:
1576	Burke Street

SAMPLER: (Signature) B Meeham

PROJECT MANAGER: Steve Bright

SAMPLE NUMBER	DATE	TIME	COMP	GRAB	SAMPLE DESCRIPTION	CONTR TYPE: GLASS	CONTR TYPE: PLASTIC	CONTR TYPE: BRASS/SS TUBE	ANALYSIS REQUESTED: 8015M*	ANALYSIS REQUESTED: VOCs 8260B**	ANALYSIS REQUESTED: 200.7 Chromium	ANALYSIS REQUESTED: 218.6 Hex. Chromium	NUMBER OF CONTAINERS	REMARKS
MW-2	2/19/09	1235		/	Water	/	/		/	/	/	/	7	4 VOAs, 2 1-liter plastic, 1 1-liter amber

0902270-15

* TPH-G, TPH-D, & TPH-O
** Full range plus oxygenates and ethanol

TOTAL NUMBER OF CONTAINERS 7

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
B Meeham					
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)

SAMPLES SHIPPED VIA:	SHIPPED BY: (Signature)	COURIER: (Signature)	RECEIVED FOR LAB BY: (Signature)	DATE/TIME
FedEx ☐ UPS ☐ Airborne ☐ Bus ☐ Hand ☐ _____ ☐				2/20/09 0735

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: February 27, 2009

Mr. Steve Bright
Environmental Audit, Inc.
1000 Ortega Way, Suite A
Placentia, CA 92670-7125
(714)632-8521 Fax(714)632-6754

Project: **1576 / Burke Street**
Lab I.D.: **090220-15**

Dear Mr. Bright:

The **analytical results** for the water sample, received by our laboratory on February 20, 2009, are attached. The sample was received chilled, intact, and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,

Curtis Desilets
Vice President/Program Manager

Jesse Tu, Ph.D.
Laboratory Manager

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Environmental Audit, Inc.**
1000 Ortega Way, Suite A
Placentia, CA 92670-7125
(714)632-8521 Fax(714)632-6754

PROJECT: **1576 / Burke Street**

MATRIX: WATER
DATE SAMPLED: 02/19/09
REPORT TO: MR. STEVE BRIGHT

DATE RECEIVED: 02/20/09
DATE EXTRACTED: 02/25/09
DATE ANALYZED: 02/25/09
DATE REPORTED: 02/27/09

TOTAL PETROLEUM HYDROCARBONS(TPH) - CARBON CHAIN ANALYSIS
METHOD: EPA 8015B
UNIT: uG/L = MICROGRAM PER LITER = PPB

SAMPLE I.D.	LAB I.D.	C4-C10	C11-C22	C23-C35	DF
MW-2	090220-15	ND	ND	ND	1
METHOD BLANK		ND	ND	ND	1
	PQL	50.0*	500	3000	

COMMENTS
C4-C10 = GASOLINE RANGE
C11-C22 = DIESEL RANGE
C23-C35 = MOTOR OIL RANGE
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT
* = TPH-GASOLINE ANALYZED USING 5030B/8260B PURGE & TRAP ON 02/23/09

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro Chem, Inc

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

8015B Water QC

Date Analyzed: 2/25/2009 **Units:** ug/L (PPB)

Matrix: **Water**

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: **090220-15 MS/MSD**

Analyte	SR	spk conc	MS	%MS	MSD	%MSD	%RPD	ACP %MS	ACP RPD
C11-C22 RANGE	0	150000	142860	95%	145950	97%	2%	75-125	0-20%

LCS STD RECOVERY:

Analyte	spk conc	LCS	% REC	ACP
C11-C22 RANGE	12000	13508	113%	75-125

Analyzed and Reviewed by: _____

Final Reviewer: _____

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Environmental Audit, Inc.**
1000 Ortega Way, Suite A
Placentia, CA 92670-7125
(714)632-8521 Fax(714)632-6754

PROJECT: **1576 / Burke Street**
MATRIX: WATER
DATE RECEIVED: 02/20/09
DATE SAMPLED: 02/19/09
DATE ANALYZED: 02/20-25/09
REPORT TO: MR. STEVE BRIGHT
DATE REPORTED: 02/27/09

SAMPLE I.D.: **MW-2**
LAB I.D.: 090220-15

TOTAL METALS ANALYSIS
UNIT: MG/L = MILLIGRAM PER LITER = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	EPA METHOD
Chromium(Cr), Total	ND	0.01	1	200.7
Chromium VI(Cr 6)	0.0039	0.0002	1	218.6

COMMENTS
DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection limit or non-detected

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: **Environmental Audit, Inc.**
1000 Ortega Way, Suite A
Placentia, CA 92670-7125
(714)632-8521 Fax(714)632-6754

PROJECT: **1576 / Burke Street**
MATRIX:WATER
DATE SAMPLED:02/19/09
REPORT TO:MR. STEVE BRIGHT
DATE RECEIVED:02/20/09
DATE ANALYZED:02/20-25/09
DATE REPORTED:02/27/09

METHOD BLANK FOR LAB I.D.: 090220-15

TOTAL METALS ANALYSIS
UNIT: MG/L = MILLIGRAM PER LITER = PPM

ELEMENT ANALYZED	SAMPLE RESULT	PQL	DF	EPA METHOD
Chromium(Cr), Total	ND	0.01	1	200.7
Chromium VI(Cr 6)	ND	0.0002	1	218.6

COMMENTS
DF = Dilution Factor
PQL = Practical Quantitation Limit
Actual Detection Limit = PQL X DF
ND = Below the Actual Detection limit or non-detected

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

QA/QC for TTLC Metals Analysis --WATER MATRIX

Matrix Spike/ Matrix Spike Duplicate/ LCS :

ANALYSIS DATE: 2/23/2009 **Unit : mg/kg(ppm)**

Analysis	Spk.Sample ID	LCS CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Copper (Cu)	090223-LCS	1.00	99	PASS	0	1.00	1.02	102%	0.996	100%	2%
Lead (Pb)	090223-LCS	1.00	111	PASS	0	1.00	1.07	107%	1.11	111%	4%
Nickel (Ni)	090223-LCS	1.00	110	PASS	0	1.00	1.05	105%	1.11	111%	6%

ANALYSIS DATE. :

Analysis	Spk.Sample ID	LCS CONC.	LCS %Rec.	LCS STATUS	Sample Result	Spike Conc.	MS	% Rec MS	MSD	% Rec MSD	% RPD
Mercury (Hg)		0.00250		FAIL	0	0.00250		0%		0%	#DIV/0!

MS/MSD Status:

Analysis	%MS	%MSD	%LCS	%RPD
Copper (Cu)	PASS	PASS	PASS	PASS
Lead (Pb)	PASS	PASS	PASS	PASS
Nickel (Ni)	PASS	PASS	PASS	PASS
Mercury (Hg)	PASS	PASS	PASS	PASS
Accepted Range	**75 ~ 125**	**75 ~ 125**	**85 ~ 115**	**0 ~ 20**

ANALYST: D

FINAL REVIEWER: [signature]

Enviro-Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766
Tel (909) 590-5905
Fax (909) 590-5907

QA/QC Report for Chromium, Hexavalent (Cr^{6+})

Analysis Method: EPA 218.6

Analysis Date: 2/25/2009

Matrix Type: **Water**
Conc. Unit: µg/L

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spike Sample ID:	**090220-15**	
Sample Result	3.90	
Spike Conc.	5.00	
MS	8.80	
%MS	**98%**	***Pass***
MSD	8.72	
%MSD	**96%**	***Pass***
%RPD	**2%**	***Pass***
ACP %MS	75~125%	
ACP %RPD	0~20%	

LCS STD Recovery

Spike Conc.	5.00	
LCS	5.28	
%LCS	**106%**	***Pass***
ACP %LCS	85~115%	

Analyzed/Reviewed by _____

Final Reviewed by _____

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Environmental Audit, Inc.**
1000 Ortega Way, Suite A
Placentia, CA 92670-7125
(714)632-8521 Fax(714)632-6754

PROJECT: **1576 / Burke Street**
MATRIX: WATER
DATE SAMPLED: 02/19/09
REPORT TO: MR. STEVE BRIGHT
DATE RECEIVED: 02/20/09
DATE ANALYZED: 02/20/09
DATE REPORTED: 02/27/09

EPA 8260B (DIRECT INJECTION) FOR ALCOHOLS
UNIT: MG/KG = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	ETHANOL	DF
MW-2	090220-15	ND	1
Method Blank	---	ND	1
	PQL	10	

COMMENTS:
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT

Data Reviewed and Approved by: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro - Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Environmental Audit, Inc.**
1000 Ortega Way, Suite A
Placentia, CA 92670-7125
(714)632-8521 Fax(714)632-6754

PROJECT: **1576 / Burke Street**
MATRIX: WATER
DATE SAMPLED: 02/19/09
REPORT TO: MR. STEVE BRIGHT
DATE RECEIVED: 02/20/09
DATE ANALYZED: 02/23/09
DATE REPORTED: 02/27/09

EPA 5030B/8260B FOR FUEL OXYGENATES
UNITS: uG/L = MICROGRAM PER LITER = PPB

SAMPLE I.D.	LAB I.D.	ETBE	DIPE	MTBE	TAME	TBA	DF
MW-2	090220-15	ND	ND	ND	ND	ND	1
METHOD BLANK		ND	ND	ND	ND	ND	1
	PQL	5	5	3	5	50	

COMMENTS:
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
ND = NON-DETECTED OR BELOW THE ACTUAL DETECTION LIMIT
ETBE = ETHYL tert-BUTYL ETHER DIPE = ISOPROPYL ETHER
MTBE = METHYL tert-BUTYL ETHER TAME = TERT-AMYL METHYL ETHER
TBA = TERTIARY BUTYL ALCOHOL

Data Reviewed and Approved by: _____

CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Environmental Audit, Inc.**
1000 Ortega Way, Suite A
Placentia, CA 92670-7125
(714)632-8521 Fax(714)632-6754

PROJECT: **1576 / Burke Street**
MATRIX: WATER
DATE SAMPLED: 02/19/09
REPORT TO: MR. STEVE BRIGHT
DATE RECEIVED: 02/20/09
DATE ANALYZED: 02/23/09
DATE REPORTED: 02/27/09

SAMPLE I.D.: **MW-2** LAB I.D.: 090220-15

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 1 OF 2
UNIT: uG/L = MICROGRAM PER LITER = PPB

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	10
BENZENE	ND	1
BROMOBENZENE	ND	1
BROMOCHLOROMETHANE	ND	1
BROMODICHLOROMETHANE	ND	1
BROMOFORM	ND	1
BROMOMETHANE	ND	1
2-BUTANONE (MEK)	ND	10
N-BUTYLBENZENE	ND	1
SEC-BUTYLBENZENE	ND	1
TERT-BUTYLBENZENE	ND	1
CARBON DISULFIDE	ND	5
CARBON TETRACHLORIDE	ND	1
CHLOROBENZENE	ND	1
CHLOROETHANE	ND	1
CHLOROFORM	ND	1
CHLOROMETHANE	ND	1
2-CHLOROTOLUENE	ND	1
4-CHLOROTOLUENE	ND	1
DIBROMOCHLOROMETHANE	ND	1
1,2-DIBROMO-3-CHLOROPROPANE	ND	1
1,2-DIBROMOETHANE	ND	1
DIBROMOMETHANE	ND	1
1,2-DICHLOROBENZENE	ND	1
1,3-DICHLOROBENZENE	ND	1
1,4-DICHLOROBENZENE	ND	1
DICHLORODIFLUOROMETHANE	ND	1
1,1-DICHLOROETHANE	ND	1
1,2-DICHLOROETHANE	ND	1
1,1-DICHLOROETHENE	ND	1
CIS-1,2-DICHLOROETHENE	ND	1
TRANS-1,2-DICHLOROETHENE	ND	1
1,2-DICHLOROPROPANE	ND	1
1,3-DICHLOROPROPANE	ND	1

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

Enviro – Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Environmental Audit, Inc.**
1000 Ortega Way, Suite A
Placentia, CA 92670-7125
(714)632-8521 Fax(714)632-6754

PROJECT: **1576 / Burke Street**
MATRIX: WATER
DATE SAMPLED: 02/19/09
REPORT TO: MR. STEVE BRIGHT
DATE RECEIVED: 02/20/09
DATE ANALYZED: 02/23/09
DATE REPORTED: 02/27/09

SAMPLE I.D.: **MW-2**
LAB I.D.: 090220-15

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 2 OF 2
UNIT: uG/L = MICROGRAM PER LITER = PPB

PARAMETER	SAMPLE RESULT	PQL X1
2,2-DICHLOROPROPANE	ND	1
1,1-DICHLOROPROPENE	ND	1
CIS-1,3-DICHLOROPROPENE	ND	1
TRANS-1,3-DICHLOROPROPENE	ND	1
ETHYLBENZENE	ND	1
2-HEXANONE	ND	10
HEXACHLOROBUTADIENE	ND	1
ISOPROPYLBENZENE	ND	1
4-ISOPROPYLTOLUENE	ND	1
4-METHYL-2-PENTANONE (MIBK)	ND	10
METHYL tert-BUTYL ETHER (MTBE)	ND	3
METHYLENE CHLORIDE	ND	5
NAPHTHALENE	ND	1
N-PROPYLBENZENE	ND	1
STYRENE	ND	1
1,1,1,2-TETRACHLOROETHANE	ND	1
1,1,2,2-TETRACHLOROETHANE	ND	1
TETRACHLOROETHENE (PCE)	7.19	1
TOLUENE	ND	1
1,2,3-TRICHLOROBENZENE	ND	1
1,2,4-TRICHLOROBENZENE	ND	1
1,1,1-TRICHLOROETHANE	ND	1
1,1,2-TRICHLOROETHANE	ND	1
TRICHLOROETHENE (TCE)	ND	1
TRICHLOROFLUOROMETHANE	ND	1
1,2,3-TRICHLOROPROPANE	ND	1
1,2,4-TRIMETHYLBENZENE	ND	1
1,3,5-TRIMETHYLBENZENE	ND	1
VINYL CHLORIDE	ND	1
M/P-XYLENE	ND	2
O-XYLENE	ND	1

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Enviro - Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: **Environmental Audit, Inc.**
1000 Ortega Way, Suite A
Placentia, CA 92670-7125
(714)632-8521 Fax(714)632-6754

PROJECT: **1576 / Burke Street**
MATRIX: WATER — DATE RECEIVED: 02/20/09
DATE SAMPLED: 02/19/09 — DATE ANALYZED: 02/23/09
REPORT TO: MR. STEVE BRIGHT — DATE REPORTED: 02/27/09

METHOD BLANK FOR LAB I.D.: 090220-15

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 1 OF 2
UNIT: uG/L = MICROGRAM PER LITER = PPB

PARAMETER	SAMPLE RESULT	PQL X1
ACETONE	ND	10
BENZENE	ND	1
BROMOBENZENE	ND	1
BROMOCHLOROMETHANE	ND	1
BROMODICHLOROMETHANE	ND	1
BROMOFORM	ND	1
BROMOMETHANE	ND	1
2-BUTANONE (MEK)	ND	10
N-BUTYLBENZENE	ND	1
SEC-BUTYLBENZENE	ND	1
TERT-BUTYLBENZENE	ND	1
CARBON DISULFIDE	ND	5
CARBON TETRACHLORIDE	ND	1
CHLOROBENZENE	ND	1
CHLOROETHANE	ND	1
CHLOROFORM	ND	1
CHLOROMETHANE	ND	1
2-CHLOROTOLUENE	ND	1
4-CHLOROTOLUENE	ND	1
DIBROMOCHLOROMETHANE	ND	1
1,2-DIBROMO-3-CHLOROPROPANE	ND	1
1,2-DIBROMOETHANE	ND	1
DIBROMOMETHANE	ND	1
1,2-DICHLOROBENZENE	ND	1
1,3-DICHLOROBENZENE	ND	1
1,4-DICHLOROBENZENE	ND	1
DICHLORODIFLUOROMETHANE	ND	1
1,1-DICHLOROETHANE	ND	1
1,2-DICHLOROETHANE	ND	1
1,1-DICHLOROETHENE	ND	1
CIS-1,2-DICHLOROETHENE	ND	1
TRANS-1,2-DICHLOROETHENE	ND	1
1,2-DICHLOROPROPANE	ND	1
1,3-DICHLOROPROPANE	ND	1

----- TO BE CONTINUED ON PAGE #2 -----

DATA REVIEWED AND APPROVED BY: _____

Enviro - Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

METHOD BLANK REPORT

CUSTOMER: **Environmental Audit, Inc.**
1000 Ortega Way, Suite A
Placentia, CA 92670-7125
(714)632-8521 Fax(714)632-6754

PROJECT: **1576 / Burke Street**
MATRIX:WATER — DATE RECEIVED:02/20/09
DATE SAMPLED:02/19/09 — DATE ANALYZED:02/23/09
REPORT TO:MR. STEVE BRIGHT — DATE REPORTED:02/27/09

METHOD BLANK FOR LAB I.D.: 090220-15

ANALYSIS: VOLATILE ORGANICS, EPA METHOD 5030B/8260B, PAGE 2 OF 2
UNIT: uG/L = MICROGRAM PER LITER = PPB

PARAMETER	SAMPLE RESULT	PQL X1
2,2-DICHLOROPROPANE	ND	1
1,1-DICHLOROPROPENE	ND	1
CIS-1,3-DICHLOROPROPENE	ND	1
TRANS-1,3-DICHLOROPROPENE	ND	1
ETHYLBENZENE	ND	1
2-HEXANONE	ND	10
HEXACHLOROBUTADIENE	ND	1
ISOPROPYLBENZENE	ND	1
4-ISOPROPYLTOLUENE	ND	1
4-METHYL-2-PENTANONE (MIBK)	ND	10
METHYL tert-BUTYL ETHER (MTBE)	ND	3
METHYLENE CHLORIDE	ND	5
NAPHTHALENE	ND	1
N-PROPYLBENZENE	ND	1
STYRENE	ND	1
1,1,1,2-TETRACHLOROETHANE	ND	1
1,1,2,2-TETRACHLOROETHANE	ND	1
TETRACHLOROETHENE (PCE)	ND	1
TOLUENE	ND	1
1,2,3-TRICHLOROBENZENE	ND	1
1,2,4-TRICHLOROBENZENE	ND	1
1,1,1-TRICHLOROETHANE	ND	1
1,1,2-TRICHLOROETHANE	ND	1
TRICHLOROETHENE (TCE)	ND	1
TRICHLOROFLUOROMETHANE	ND	1
1,2,3-TRICHLOROPROPANE	ND	1
1,2,4-TRIMETHYLBENZENE	ND	1
1,3,5-TRIMETHYLBENZENE	ND	1
VINYL CHLORIDE	ND	1
M/P-XYLENE	ND	2
O-XYLENE	ND	1

COMMENTS PQL = PRACTICAL QUANTITATION LIMIT
ND = NON-DETECTED OR BELOW THE PQL
DATA REVIEWED AND APPROVED BY:
CAL-DHS CERTIFICATE # 1555

Enviro-Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909)590-5905 Fax (909)590-5907

8260B QA/QC Report

Date Analyzed: 2/23~24/2009 **Matrix:** Water
Machine: B **Unit:** ug/L (PPB)

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)
Spiked Sample Lab I.D.: 090220-16

Analyte	S.R.	spk conc	MS	%RC	MSD	%RC	%RPD	ACP %RC	ACP RPD
Benzene	0	25.0	26.0	104%	26.2	105%	1%	75-125	0-20
Chlorobenzene	0	25.0	26.1	104%	25.8	103%	1%	75-125	0-20
1,1-Dichloroethene	0	25.0	24.3	97%	26.3	105%	8%	75-125	0-20
Toluene	0	25.0	25.8	103%	25.0	100%	3%	75-125	0-20
Trichloroethene (TCE)	0	25.0	26.3	105%	26.3	105%	0%	75-125	0-20

Lab Control Spike (LCS):

Analyte	spk conc	LCS	%RC	ACP %RC
Benzene	25.0	24.8	99%	75-125
Chlorobenzene	25.0	23.1	92%	75-125
Chloroform	25.0	25.8	103%	75-125
1,1-Dichlorothene	25.0	24.7	99%	75-125
Ethylbenzene	25.0	23.3	93%	75-125
o-Xylene	25.0	22.7	91%	75-125
m,p-Xylene	50.0	47.7	95%	75-125
Toluene	25.0	24.2	97%	75-125
1,1,1-Trichloroethane	25.0	25.5	102%	75-125
Trichloroethene (TCE)	25.0	23.7	95%	75-125

Surrogate Recovery	spk conc	ACP %RC	MB %RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.				090219-12	090219-13	090219-21	090219-22	090219-23	090219-24
Dibromofluoromethane	25.0	70-130	113%	110%	118%	104%	107%	1009%	108%
Toluene-d8	25.0	70-130	101%	102%	105%	104%	103%	99%	104%
4-Bromofluorobenzene	25.0	70-130	90%	93%	101%	93%	93%	90%	91%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			090219-25	090219-26	090220-15	090220-16	090220-17	090220-18	090220-19
Dibromofluoromethane	25.0	70-130	109%	108%	112%	115%	113%	112%	116%
Toluene-d8	25.0	70-130	100%	102%	102%	101%	102%	101%	102%
4-Bromofluorobenzene	25.0	70-130	90%	94%	83%	89%	85%	82%	88%

Surrogate Recovery	spk conc	ACP %RC	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Sample I.D.			090220-20	090220-21	090220-22	090220-24	090220-44	090220-45	090223-9
Dibromofluoromethane	25.0	70-130	117%	117%	117%	116%	118%	117%	114%
Toluene-d8	25.0	70-130	103%	107%	104%	101%	100%	113%	103%
4-Bromofluorobenzene	25.0	70-130	88%	89%	89%	87%	88%	89%	89%

** = Surrogate fail due to matrix interference; LCS, MS, MSD are in control therefore the analysis is in control.*
S.R. = Sample Results *%RC = Percent Recovery*
spk conc = Spike Concentration *ACP %RC = Accepted Percent Recovery*
MS = Matrix Spike *MSD = Matrix Spike Duplicate*

Analyzed/Reviewed By: _____

Final Reviewer: _____

MOBILE GEOCHEMISTRY

H&P

Chain of Custody Record

☒ 2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159
☐ 3825 Industry Avenue, Lakewood, CA 90712 • ph 562.426.6991 • fax 562.426.6995

LE 702078

Date: 02/24/09
Field H&P Project #: BAM EAU022309-SB1/4
~~Outside Lab~~: EAU022409-11
In-House

Client: Environmental Audit
Address: 1000-A Ortega Way
Placentia, CA 92670
Email: sbright@envaudit.com Phone: (714) 632-8521 ext. 224

Collector: Amilcar S
Client Project # 1976
Location: 11700 Burke St., Santa Fe Springs
Fax:

Page: 1 of 1
Project Contact: Steve Bright
Turn around time: STD

EDF: Yes ☐ No ☒
Global ID:

Sample Receipt
Intact: ☒ Yes ☐ No
Seal Intact: ☐ Yes ☐ No ☒ N/A
Cold: ☐ Yes ☒ No
N/A (Received on Site) 20°C

Special Instructions:

UNUSED #349

Sample Name	Can # / Field Point Name	Vacuum	Purge Vol	Time	Date	Sample Type	Container Type	TPH ☐ gasoline ☐ diesel ☐ ext	418.1 TRPH	8021 for BTEX/MTBE	8260B: BTEX / Oxygenates	8260B: TPH gas	8260B: VOC's	8260B: DTSC/LARWQCB	8260B: Ketones	TO-15: Full List	TO-15: BTEX/MTBE	TO-15: LCC (specify) 4-DFB	Naphthalene ☐ 8260B ☐ TO-15	Methane	Fixed Gases ☐ CO_2 ☐ O_2 ☐ N_2				Total # of containers
E3-5'	#231	-4.5	330	0833	02/24/09	Vapor	Summa									X		X							
D6-15'	#120	-4	360	0811	02/24	↓	↓									X		X							
TRIPBLANK	#147	—	—	—	↓	↓	↓									X		X							

Relinquished by: (Signature) BMeehan	(company) EAI	Received by: (Signature) Amilcar Sandoval	(company)	Date: 2/24/09	Time: 17:00
Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:
Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:

*Signature constitutes authorization to proceed with analysis and acceptance of condition on back.

Sample disposal instruction: ☒ Disposal @ $2.00 each ☐ Return to client ☐ Pickup

H&P Mobile Geochemistry Inc.

03 March 2009

Mr. Steve Bright
Environmental Audit
1000-A Ortega Way
Placentia, CA 92670
RE: EAU022409-11

Enclosed are the results of analyses for samples received by the laboratory on 24-Feb-09 . If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Janis Villarreal
Laboratory Director

H&P Mobile Geochemistry operates under CA Environmental Lab Accreditation Program Numbers 1317, 1561, 1667, 1745, 1746, 2088, 2278, 2543, 2579 and 2595. National Environmental Laboratory Accreditation Conference (NELAC) Standards Lab #11845

2470 Impala Drive, Carlsbad , California 92010 ┌ 760.804.9678 — Fax 760.804.9159
1855 Coronado Avenue, Signal Hill , California 90755
www.HandPmg.com ┌ 1-800-834-9888

Hi P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022409-11	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	03-Mar-09

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
E3-5', P330cc	E902078-01	Vapor	24-Feb-09	24-Feb-09
D6-15', P360cc	E902078-02	Vapor	24-Feb-09	24-Feb-09
Trip Blank	E902078-03	Vapor	24-Feb-09	24-Feb-09

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022409-11	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	03-Mar-09

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
E3-5', P330cc (E902078-01) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	1	EC90203	02-Mar-09	02-Mar-09	EPA TO-15	
Propene	230	10	ug/m3	"	"	"	"	"	
Dichlorodifluoromethane	ND	10	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
Dichlorotetrafluoroethane	ND	10	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
1,3-Butadiene	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Acetone	320	20	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	ND	10	"	"	"	"	"	"	
Methylene chloride	ND	10	"	"	"	"	"	"	
Carbon disulfide	36	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Vinyl acetate	ND	10	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
2-Butanone	23	5.0	"	"	"	"	"	"	
n-Hexane	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
Ethyl acetate	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Tetrahydrofuran	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
Benzene	6.1	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Cyclohexane	ND	10	"	"	"	"	"	"	
n-Heptane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	16	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dioxane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022409-11	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	03-Mar-09

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
E3-5', P330cc (E902078-01) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
Toluene	57	5.0	ug/m3	1	EC90203	02-Mar-09	02-Mar-09	EPA TO-15	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
2-Hexanone	ND	10	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	140	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	15	5.0	"	"	"	"	"	"	
m,p-Xylene	56	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
o-Xylene	21	5.0	"	"	"	"	"	"	
Bromoform	ND	20	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	5.8	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	17	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	10	"	"	"	"	"	"	
Benzyl chloride	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	10	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	10	"	"	"	"	"	"	
Hexachlorobutadiene	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*94.9 %*		*80-120*	"	"	"	"	
Surrogate: Toluene-d8		*102 %*		*80-120*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*		*80-120*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022409-11	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	03-Mar-09

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
D6-15', P360cc (E902078-02) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	1	EC90203	02-Mar-09	02-Mar-09	EPA TO-15	
Propene	21	10	ug/m3	"	"	"	"	"	
Dichlorodifluoromethane	ND	10	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
Dichlorotetrafluoroethane	ND	10	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
1,3-Butadiene	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	11	5.0	"	"	"	"	"	"	
Acetone	550	20	"	"	"	"	"	"	
1,1-Dichloroethene	5.9	5.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	ND	10	"	"	"	"	"	"	
Methylene chloride	ND	10	"	"	"	"	"	"	
Carbon disulfide	10	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Vinyl acetate	ND	10	"	"	"	"	"	"	
1,1-Dichloroethane	5.8	5.0	"	"	"	"	"	"	
2-Butanone	9.1	5.0	"	"	"	"	"	"	
n-Hexane	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
Ethyl acetate	ND	5.0	"	"	"	"	"	"	
Chloroform	24	5.0	"	"	"	"	"	"	
Tetrahydrofuran	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
Benzene	5.8	5.0	"	"	"	"	"	"	
Carbon tetrachloride	37	5.0	"	"	"	"	"	"	
Cyclohexane	ND	10	"	"	"	"	"	"	
n-Heptane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	54	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dioxane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022409-11	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	03-Mar-09

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
D6-15', P360cc (E902078-02) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
Toluene	51	5.0	ug/m3	1	EC90203	02-Mar-09	02-Mar-09	EPA TO-15	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
2-Hexanone	ND	10	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	240	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	11	5.0	"	"	"	"	"	"	
m,p-Xylene	48	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
o-Xylene	15	5.0	"	"	"	"	"	"	
Bromoform	ND	20	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	9.4	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	10	"	"	"	"	"	"	
Benzyl chloride	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	10	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	10	"	"	"	"	"	"	
Hexachlorobutadiene	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*98.6 %*		*80-120*	"	"	"	"	
Surrogate: Toluene-d8		*104 %*		*80-120*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*103 %*		*80-120*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022409-11	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	03-Mar-09

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
Trip Blank (E902078-03) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	1	EC90203	02-Mar-09	02-Mar-09	EPA TO-15	
Propene	ND	10	ug/m3	"	"	"	"	"	
Dichlorodifluoromethane	ND	10	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
Dichlorotetrafluoroethane	ND	10	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
1,3-Butadiene	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
Acetone	ND	20	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane	ND	10	"	"	"	"	"	"	
Methylene chloride	ND	10	"	"	"	"	"	"	
Carbon disulfide	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Vinyl acetate	ND	10	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
2-Butanone	ND	5.0	"	"	"	"	"	"	
n-Hexane	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
Ethyl acetate	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Tetrahydrofuran	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Cyclohexane	ND	10	"	"	"	"	"	"	
n-Heptane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,4-Dioxane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022409-11	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	03-Mar-09

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
Trip Blank (E902078-03) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
Toluene	ND	5.0	ug/m3	1	EC90203	02-Mar-09	02-Mar-09	EPA TO-15	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
2-Hexanone	ND	10	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	20	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	10	"	"	"	"	"	"	
Benzyl chloride	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	10	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	10	"	"	"	"	"	"	
Hexachlorobutadiene	ND	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*104 %*		*80-120*	"	"	"	"	
Surrogate: Toluene-d8		*100 %*		*80-120*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.8 %*		*80-120*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022409-11	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	03-Mar-09

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC90203 - TO-15										
Blank (EC90203-BLK1)				Prepared & Analyzed: 02-Mar-09						
1,1-Difluoroethane (LCC)	ND	10	ug/l							
Propene	ND	10	ug/m3							
Dichlorodifluoromethane	ND	10	"							
Chloromethane	ND	5.0	"							
Dichlorotetrafluoroethane	ND	10	"							
Vinyl chloride	ND	5.0	"							
1,3-Butadiene	ND	5.0	"							
Bromomethane	ND	5.0	"							
Chloroethane	ND	5.0	"							
Trichlorofluoromethane	ND	5.0	"							
Acetone	ND	20	"							
1,1-Dichloroethene	ND	5.0	"							
1,1,2-Trichlorotrifluoroethane	ND	10	"							
Methylene chloride	ND	10	"							
Carbon disulfide	ND	5.0	"							
trans-1,2-Dichloroethene	ND	5.0	"							
Methyl tert-butyl ether	ND	5.0	"							
Vinyl acetate	ND	10	"							
1,1-Dichloroethane	ND	5.0	"							
2-Butanone	ND	5.0	"							
n-Hexane	ND	5.0	"							
cis-1,2-Dichloroethene	ND	5.0	"							
Ethyl acetate	ND	5.0	"							
Chloroform	ND	5.0	"							
Tetrahydrofuran	ND	5.0	"							
1,1,1-Trichloroethane	ND	5.0	"							
1,2-Dichloroethane	ND	5.0	"							
Benzene	ND	5.0	"							
Carbon tetrachloride	ND	5.0	"							
Cyclohexane	ND	10	"							
n-Heptane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
1,2-Dichloropropane	ND	5.0	"							
1,4-Dioxane	ND	5.0	"							

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022409-11	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	03-Mar-09

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC90203 - TO-15										
Blank (EC90203-BLK1)				Prepared & Analyzed: 02-Mar-09						
Bromodichloromethane	ND	5.0	ug/m3							
cis-1,3-Dichloropropene	ND	5.0	"							
4-Methyl-2-pentanone	ND	5.0	"							
trans-1,3-Dichloropropene	ND	5.0	"							
Toluene	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
2-Hexanone	ND	10	"							
Dibromochloromethane	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
1,2-Dibromoethane (EDB)	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
Chlorobenzene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
m,p-Xylene	ND	5.0	"							
Styrene	ND	5.0	"							
o-Xylene	ND	5.0	"							
Bromoform	ND	20	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
4-Ethyltoluene	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	10	"							
Benzyl chloride	ND	5.0	"							
1,4-Dichlorobenzene	ND	10	"							
1,2-Dichlorobenzene	ND	10	"							
1,2,4-Trichlorobenzene	ND	10	"							
Hexachlorobutadiene	ND	10	"							
Surrogate: 1,2-Dichloroethane-d4	*205*		"	*206*		*99.8*	*80-120*			
Surrogate: Toluene-d8	*198*		"	*192*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*341*		"	*364*		*93.4*	*80-120*			

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022409-11	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	03-Mar-09

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC90203 - TO-15										
LCS (EC90203-BS1)				Prepared & Analyzed: 02-Mar-09						
Propene	41.0	10	ug/m3	35.0		117	65-135			
Dichlorodifluoromethane	109	10	"	101		108	65-135			
Chloromethane	46.8	5.0	"	42.0		112	65-135			
Dichlorotetrafluoroethane	152	10	"	142		108	65-135			
Vinyl chloride	53.9	5.0	"	52.0		104	65-135			
1,3-Butadiene	45.8	5.0	"	44.8		102	65-135			
Bromomethane	91.5	5.0	"	79.2		116	65-135			
Chloroethane	60.7	5.0	"	53.6		113	65-135			
Trichlorofluoromethane	132	5.0	"	113		116	65-135			
Acetone	54.3	20	"	48.4		112	65-135			
1,1-Dichloroethene	66.8	5.0	"	80.8		82.7	65-135			
1,1,2-Trichlorotrifluoroethane	161	10	"	155		103	65-135			
Methylene chloride	75.5	10	"	70.8		107	65-135			
Carbon disulfide	64.5	5.0	"	63.2		102	65-135			
trans-1,2-Dichloroethene	70.6	5.0	"	80.8		87.4	65-135			
Methyl tert-butyl ether	70.2	5.0	"	73.6		95.3	65-135			
Vinyl acetate	71.1	10	"	72.0		98.8	65-135			
1,1-Dichloroethane	86.3	5.0	"	82.4		105	65-135			
2-Butanone	52.1	5.0	"	60.0		86.9	65-135			
n-Hexane	81.4	5.0	"	72.0		113	65-135			
cis-1,2-Dichloroethene	84.6	5.0	"	80.0		106	65-135			
Ethyl acetate	79.1	5.0	"	73.6		107	65-135			
Chloroform	114	5.0	"	99.2		115	65-135			
Tetrahydrofuran	62.4	5.0	"	60.0		104	65-135			
1,1,1-Trichloroethane	124	5.0	"	111		111	65-135			
1,2-Dichloroethane	91.2	5.0	"	82.4		111	65-135			
Benzene	69.7	5.0	"	64.8		108	65-135			
Carbon tetrachloride	145	5.0	"	128		113	65-135			
Cyclohexane	75.4	10	"	70.4		107	65-135			
n-Heptane	89.9	5.0	"	83.6		108	65-135			
Trichloroethene	113	5.0	"	110		103	65-135			
1,2-Dichloropropane	105	5.0	"	94.4		111	65-135			
1,4-Dioxane	64.0	5.0	"	73.6		87.0	65-135			
Bromodichloromethane	142	5.0	"	137		104	65-135			

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022409-11	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	03-Mar-09

Volatile Organic Compounds by EPA TO-15 - Quality Control

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC90203 - TO-15										
LCS (EC90203-BS1)				Prepared & Analyzed: 02-Mar-09						
cis-1,3-Dichloropropene	84.8	5.0	ug/m3	92.4		91.7	65-135			
4-Methyl-2-pentanone	81.8	5.0	"	83.2		98.3	65-135			
trans-1,3-Dichloropropene	84.8	5.0	"	92.4		91.8	65-135			
Toluene	80.3	5.0	"	76.8		105	65-135			
1,1,2-Trichloroethane	118	5.0	"	111		106	65-135			
2-Hexanone	62.8	10	"	83.2		75.4	65-135			
Dibromochloromethane	171	5.0	"	174		98.5	65-135			
Tetrachloroethene	138	5.0	"	138		99.4	65-135			
1,2-Dibromoethane (EDB)	151	5.0	"	157		96.4	65-135			
1,1,1,2-Tetrachloroethane	151	5.0	"	140		108	65-135			
Chlorobenzene	99.3	5.0	"	93.6		106	65-135			
Ethylbenzene	91.3	5.0	"	88.4		103	65-135			
m,p-Xylene	178	5.0	"	177		101	65-135			
Styrene	81.2	5.0	"	86.8		93.6	65-135			
o-Xylene	86.9	5.0	"	88.4		98.3	65-135			
Bromoform	746	20	"	840		88.8	65-135			
1,1,2,2-Tetrachloroethane	120	5.0	"	140		85.9	65-135			
4-Ethyltoluene	77.4	5.0	"	100		77.4	65-135			
1,3,5-Trimethylbenzene	86.4	5.0	"	100		86.4	65-135			
1,2,4-Trimethylbenzene	69.4	5.0	"	100		69.4	65-135			
1,3-Dichlorobenzene	94.9	10	"	122		77.5	65-135			
Benzyl chloride	62.4	5.0	"	105		59.5	65-135			QL-1L
1,4-Dichlorobenzene	94.9	10	"	122		77.5	65-135			
1,2-Dichlorobenzene	86.4	10	"	122		70.6	65-135			
1,2,4-Trichlorobenzene	52.7	10	"	151		34.8	65-135			QL-1L
Hexachlorobutadiene	92.0	10	"	218		42.3	65-135			QL-1L
Surrogate: 1,2-Dichloroethane-d4	*214*		"	*206*		*104*	*80-120*			
Surrogate: Toluene-d8	*192*		"	*192*		*99.9*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*383*		"	*364*		*105*	*80-120*			

Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022409-11	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	03-Mar-09

Notes and Definitions

QL-1L	The LCS and/or LCSD recoveries fell below the established control specifications for this analyte. Any result for this compound is qualified and should be considered an estimate only.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

MOBILE GEOCHEMISTRY

H&P

Chain of Custody Record

☐ 2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159
☐ 3825 Industry Avenue, Lakewood, CA 90712 • ph 562.426.6991 • fax 562.426.6995

E902069
EB92301

Date: 02/23/09
H&P Project # EAU022309-SBI/L4
Outside Lab: _____

Client: Environmental Audit
Address: 1000-A Ortega Way City
Placentia, CA 92670
Email: sbright@envaudit.com Phone: (714) 632-8521 ext. 224

Collector: Daniel Chávez
Client Project # 1576
Location: 11700 Burke St., Santa Fe Springs
Fax: _____

Page: 1 of 2
Project Contact: Steve Bright
Turn around time: _____

EDF: Yes☐ No☐
Global ID: _____

Sample Receipt
Intact: ☐ Yes ☐ No
Seal Intact: ☐ Yes ☐ No ☐ N/A
Cold: ☐ Yes ☐ No
(N/A (Received on Site))

Special Instructions:

Sample Name	Notes / ~~Field Point Name~~	Purge Vol (cc)	Time	Date	Sample Type	Container Type	TPH ☐ gasoline ☐ diesel ☐ ext	418.1 TRPH	8021 for BTEX/MTBE	8260B: BTEX / Oxygenates	8260B: TPH gas	8260B: VOC's	8260B: DTSC/LARWQCB	8260B: Ketones	TO-15: Full List	TO-15: BTEX/MTBE	LCC (specify) 4-DFA	Naphthalene ☐ 8260B ☐ TO-15	Methane	Fixed Gases ☐ CO2 ☐ O2 ☐ N2				Total # of containers
01 E1-5	1PV	110	8:01	02/23/09	Vapor	Syringe							X				X							1
02 E1-5	3PV	330	8:02																					
03 E1-5	7PV	770	8:04																					
04 E1-15		360	9:08																					
05 E3-15		360	9:12																					
06 E3-5		330	9:14																					
07 E5-15		360	9:47																					
08 E5-5		330	9:49																					
09 D6-15		360	10:25																					
10 D6-5		330	10:27																					

Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:
B McKown	EAI	Daniel J Chávez	H&P	02/23/09	14:00
Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:
Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:

*Signature constitutes authorization to proceed with analysis and acceptance of condition on back.

Sample disposal instruction: ☐ *Disposal @ $2.00 each* ☐ *Return to client* ☐ *Pickup*

MOBILE GEOCHEMISTRY

H&P

Chain of Custody Record

☐ 2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159
☐ 3825 Industry Avenue, Lakewood, CA 90712 • ph 562.426.6991 • fax 562.426.6995

Date: 02/23/09
H&P Project # EA022309-SB1/L4
Outside Lab: _____

Client: Environmental Audit
Address: 1000-A Ortega Way City Placentia, CA 92870
Email: sbright@envaudit.com Phone: (714) 632-8521 ext. 224

Collector: Daniel Chavez
Client Project # 1576
Location: 11700 Burke St., Santa Fe Springs
Fax: _____

Page: 2 of 2
Project Contact: Steve Bright
Turn around time: _____

EDF: Yes ☐ No ☐
Global ID: _____

Sample Receipt
Intact: ☐ Yes ☐ No
Seal Intact: ☐ Yes ☐ No ☐ N/A
Cold: ☐ Yes ☐ No
N/A (Received on Site)

Special Instructions:

	Sample Name	Notes ~~Field Point Name~~	(cc) Purge Vol	Time	Date	Sample Type	Container Type	TPH ☐ gasoline ☐ diesel ☐ ext	418.1 TRPH	8021 for BTEX/MTBE	8260B: BTEX / Oxygenates	8260B: TPH gas	8260B: VOC's	8260B: DTSC/LARWQCB	8260B: Ketones	TO-15: Full List	TO-15: BTEX/MTBE	LCC (specify) 4-DFA	Naphthalene ☐ 8260B ☐ TO-15	Methane	Fixed Gases ☐ CO_2 ☐ O_2 ☐ N_2				Total # of containers
11	D5-15		360	10:52	02/23/09	Vapor	Syringe							X				X							1
12	D5-5		330	10:54																					
13	D4-15		360	11:26																					
14	D4-5		330	11:28																					
15	C6-15		360	11:52																					
16	C6-5		330	11:54																					
17	C5-15		360	12:36																					
18	C5-5		330	12:38																					
19	C4-15		360	13:13																					
20	C4-15 Dup		410	13:14																					

Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:
B Meehan		Daniel J Chavez	I+P	02/23/09	14:00
Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:
Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:

*Signature constitutes authorization to proceed with analysis and acceptance of condition on back.

Sample disposal instruction: ☐ Disposal @ $2.00 each ☐ Return to client ☐ Pickup

MOBILE GEOCHEMISTRY

H&P

Chain of Custody Record

☐ 2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159
☐ 3825 Industry Avenue, Lakewood, CA 90712 • ph 562.426.6991 • fax 562.426.6995

E902070
EB92302

Date: 2-23-09
H&P Project # EAU022309-L4/SB1
Outside Lab:

Client: Environmental Audit
Address: 1000-A Ortega Way City: Placentia, CA. 92670
Email: sbright@envaudit.com Phone: 714-632-8521 Ext 224

Collector: Cherita
Client Project # 1576
Location: 11700 Burke St.
Fax:

Page: 1 of 2
Project Contact: Steve Bright
Turn around time:

EDF: Yes☐ No☐
Global ID:

Sample Receipt
Intact: ☐ Yes ☐ No
Seal Intact: ☐ Yes ☐ No ☐ N/A
Cold: ☐ Yes ☐ No
N/A (Received on Site)

Special Instructions:
bmecham@envaudit.com

	Sample Name	Field Point Name	Purge Vol	Time	Date	Sample Type	Container Type	TPH ☐ gasoline ☐ diesel ☐ ext	418.1 TRPH	8021 for BTEX/MTBE	8260B: BTEX / Oxygenates	8260B: TPH gas	8260B: VOC's	8260B: DTSC/LARWQCB	8260B: Ketones	TO-15: Full List	TO-15: BTEX/MTBE	LCC (specify) 1,1DFA	Naphthalene ☐ 8260B ☐ TO-15	Methane	Fixed Gases ☐ CO_2 ☐ O_2 ☐ N_2				Total # of containers
1	E2-5		P330cc	0905	2-23-09	Vapor	Glass syringe							X				X							1
2	E2-15		P350cc	0907										X				X							1
3	E4-5		P330cc	0932										X				X							1
4	E4-15		P350cc	0935										X				X							1
5	D1-5		P330cc	1005										X				X							1
6	D1-15		P350cc	1007										X				X							1
7	D2-5		P330cc	1044										X				X							1
8	D2-15		P350cc	1047										X				X							1
9	D3-5		P330cc	1140										X				X							1
10	D3-15		P350cc	1142										X				X							1

Relinquished by: (Signature) B Mecham	(company) EAI	Received by: (Signature) Christa Smith	(company) H&P Mobile	Date: 2-23-09	Time:
Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:
Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:

*Signature constitutes authorization to proceed with analysis and acceptance of condition on back.

Sample disposal instruction: ☐ Disposal @ $2.00 each ☐ Return to client ☐ Pickup

MOBILE GEOCHEMISTRY

H&P

Chain of Custody Record

☐ 2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159

☐ 3825 Industry Avenue, Lakewood, CA 90712 • ph 562.426.6991 • fax 562.426.6995

Date: 2-23-09

H&P Project # EAU022309-24/SB1

Outside Lab: _____

Client: Environmental Audit

Address: 1000-A Ortega Way City Placentia, CA. 92870

Email: sbright@envaudit.com Phone: 714-632-8521 Ext 224

Collector: Cherita

Client Project # 1576

Location: 11700 Burke St.

Fax: _____

Page: 2 of 2

Project Contact: Steve Bright

Turn around time: _____

EDF: Yes☐ No☐

Global ID: _____

Sample Receipt
Intact: ☐ Yes ☐ No
Seal Intact: ☐ Yes ☐ No ☐ N/A
Cold: ☐ Yes ☐ No
N/A (Received on Site)

Special Instructions:
bmecham@envaudit.com

	Sample Name	Field Point Name	Purge Vol	Time	Date	Sample Type	Container Type	TPH ☐ gasoline ☐ diesel ☐ ext	418.1 TRPH	8021 for BTEX/MTBE	8260B: BTEX / Oxygenates	8260B: TPH gas	8260B: VOC's	8260B: DTSC/LARWQCB	8260B: Ketones	TO-15: Full List	TO-15: BTEX/MTBE	LCC (specify) LIDFA	Naphthalene ☐ 8260B ☐ TO-15	Methane	Fixed Gases ☐ CO_2 ☐ O_2 ☐ N_2				Total # of containers
11	A5-5		330cc	1220	2-23-09	Vapor	Glass syringe							X				X							1
12	A5-15		350cc	1222										X				X							1
13	A4-15	350cc	~~330cc~~ 350cc	1245										X				X							1
14	A4-15 Dup	A4-15 Dup	400cc	~~350cc~~ 400cc	1247									X				X							1
15	A4-5		330cc	1320										X				X							1
16	B4-5		330cc	1350										X				X							1
17	B4-15		350cc	1355										X				X							1

Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:
B Mecham	EAI	Cherita Smith	H&P Mobile Geo	2-23-09	
Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:
Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:

*Signature constitutes authorization to proceed with analysis and acceptance of condition on back.

Sample disposal instruction: ☐ *Disposal @ $2.00 each* ☐ *Return to client* ☐ *Pickup*

MOBILE GEOCHEMISTRY

H&P

Chain of Custody Record

☐ 2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159
☐ 3825 Industry Avenue, Lakewood, CA 90712 • ph 562.426.6991 • fax 562.426.6995

E902073
EB92401

Date: 02/24/09
H&P Project # EA4022309-SB1/L4
Outside Lab: _____

Client: Environmental Audit
Address: 1000-A Ortega Way
Placentia, CA 92670
Email: sbright@envaudit.com Phone: (714)632-8521 ext. 224

Collector: Daniel Chavez
Client Project # 1576
Location: 11700 Burke St., Santa Fe Springs
Fax: _____

Page: 1 of 2
Project Contact: Steve Bright
Turn around time: _____

EDF: Yes☐ No☐
Global ID: _____

Sample Receipt
Intact: ☐ Yes ☐ No
Seal Intact: ☐ Yes ☐ No ☐ N/A
Cold: ☐ Yes ☐ No
N/A (Received on Site)

Special Instructions:

	Sample Name	Notes ~~Field Point Name~~	Purge Vol (cc)	Time	Date	Sample Type	Container Type	TPH ☐ gasoline ☐ diesel ☐ ext	418.1 TRPH	8021 for BTEX/MTBE	8260B: BTEX / Oxygenates	8260B: TPH gas	8260B: VOC's	8260B: DTSC/LARWQCB	8260B: Ketones	TO-15: Full List	TO-15: BTEX/MTBE	LCC (specify) LL-DEA	Naphthalene ☐ 8260B ☐ TO-15	Methane	Fixed Gases ☐ CO_2 ☐ O_2 ☐ N_2	Total # of containers
01	C4-5		330	7:43	02/24/09	Vapor	Syringe							X				X				1
02	B6-15		360	7:50																		
03	B6-5		330	7:52																		
04	B5-15		360	8:25																		
05	B5-5		330	8:27																		
06	C3-15		360	8:52																		
07	C3-5		330	8:54																		
08	B3-15		360	9:22																		
09	B3-5		330	9:24																		
10	C2-15		360	10:06	↓	↓	↓							↓				↓				↓

Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date	Time
B Mendoza	EAI	Daniel J Chavez	H&P	02/24/09	
Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date	Time
Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date	Time

*Signature constitutes authorization to proceed with analysis and acceptance of condition on back.

Sample disposal instruction: ☐ Disposal @ $2.00 each ☐ Return to client ☐ Pickup

MOBILE GEOCHEMISTRY

H&P

Chain of Custody Record

☐ 2470 Impala Dr., Carlsbad, CA 92010 • ph 760.804.9678 • fax 760.804.9159

☐ 3825 Industry Avenue, Lakewood, CA 90712 • ph 562.426.6991 • fax 562.426.6995

Date: 02/24/09

H&P Project # EAU02309-SB1/24

Outside Lab: _____

Client: Environmental Audit

Address: 1000-A Ortega Way City Placentia, CA 92670

Email: sbright@envaudit.com Phone: (714) 632-8521 ext. 224

Collector: Daniel Chavez

Client Project # 1576

Location: 11700 Burke St., Santa Fe Springs

Fax: _____

Page: 2 of 2

Project Contact: Steve Bright

Turn around time: _____

EDF: Yes ☐ No ☐

Global ID: _____

Sample Receipt
Intact: ☐ Yes ☐ No
Seal Intact: ☐ Yes ☐ No ☐ N/A
Cold: ☐ Yes ☐ No
(N/A (Received on Site))

Special Instructions:

	Sample Name	Notes ~~Field Point Name~~	Purge Vol (cc)	Time	Date	Sample Type	Container Type	TPH ☐ gasoline ☐ diesel ☐ ext	418.1 TRPH	8021 for BTEX/MTBE	8260B: BTEX / Oxygenates	8260B: TPH gas	8260B: VOC's	8260B: DTSC/LARWQCB	8260B: Ketones	TO-15: Full List	TO-15: BTEX/MTBE	LCC (specify) 4 - DFA	Naphthalene ☐ 8260B ☐ TO-15	Methane	Fixed Gases ☐ CO_2 ☐ O_2 ☐ N_2	Total # of containers
11	C2-5		330	10:08	2/24/09	Vapor	Syringe							X				X				1
12	B2-15		360	10:41																		
13	B2-5		330	10:43																		
14	C1-15		360	11:15																		
15	C1-5		330	11:17																		
16	B1-15		360	11:51																		
17	B1-5		330	11:53																		
18	B1-5 Dup		380	11:54	↓	↓	↓							↓				↓				↓

Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:
B Meehan	EAI	Daniel J Chavez	H&P	02/24/09	
Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:
Relinquished by: (Signature)	(company)	Received by: (Signature)	(company)	Date:	Time:

*Signature constitutes authorization to proceed with analysis and acceptance of condition on back.

Sample disposal instruction: ☐ Disposal @ $2.00 each ☐ Return to client ☐ Pickup

H&P

Mobile Geochemistry Inc.

02 March 2009

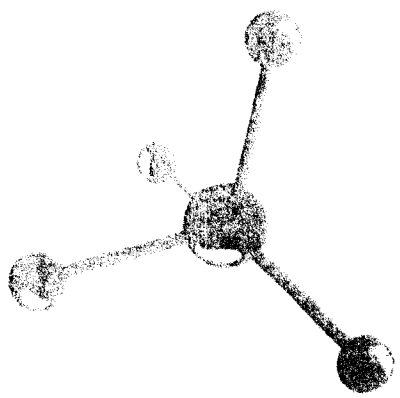
Mr. Steve Bright
Environmental Audit
1000-A Ortega Way
Placentia, CA 92670
RE: EAU022309-SB1/L4

Enclosed are the results of analyses for samples received by the laboratory on 2/23/2009 - 2/24/2009. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Janis Villarreal
Laboratory Director

H&P Mobile Geochemistry operates under CA Environmental Lab Accreditation Program Numbers 1317, 1561, 1667, 1745, 1746, 2088, 2278, 2543, 2579 and 2595. National Environmental Laboratory Accreditation Conference (NELAC) Standards Lab #11845



2470 Impala Drive, Carlsbad, California 92010 ┌ 760.804.9678 — Fax 760.804.9159
1855 Coronado Avenue, Signal Hill, California 90755
www.HandPmg.com ┌ 1-800-834-9888

Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
E1-5, 1PV, P110cc	E902069-01	Vapor	23-Feb-09	23-Feb-09
E1-5, 3PV, P330cc	E902069-02	Vapor	23-Feb-09	23-Feb-09
E1-5, 7PV, P770cc	E902069-03	Vapor	23-Feb-09	23-Feb-09
E1-15, P360cc	E902069-04	Vapor	23-Feb-09	23-Feb-09
E3-15, P360cc	E902069-05	Vapor	23-Feb-09	23-Feb-09
E3-5, P330cc	E902069-06	Vapor	23-Feb-09	23-Feb-09
E5-15, P360cc	E902069-07	Vapor	23-Feb-09	23-Feb-09
E5-5, P330cc	E902069-08	Vapor	23-Feb-09	23-Feb-09
D6-15, P360cc	E902069-09	Vapor	23-Feb-09	23-Feb-09
D6-5, P330cc	E902069-10	Vapor	23-Feb-09	23-Feb-09
D5-15, P360cc	E902069-11	Vapor	23-Feb-09	23-Feb-09
D5-5, P330cc	E902069-12	Vapor	23-Feb-09	23-Feb-09
D4-15, P360cc	E902069-13	Vapor	23-Feb-09	23-Feb-09
D4-5, P330cc	E902069-14	Vapor	23-Feb-09	23-Feb-09
C6-15, P360cc	E902069-15	Vapor	23-Feb-09	23-Feb-09
C6-5, P330cc	E902069-16	Vapor	23-Feb-09	23-Feb-09
C5-15, P360cc	E902069-17	Vapor	23-Feb-09	23-Feb-09
C5-5, P330cc	E902069-18	Vapor	23-Feb-09	23-Feb-09
C4-15, P360cc	E902069-19	Vapor	23-Feb-09	23-Feb-09
C4-15 Dup, P410cc	E902069-20	Vapor	23-Feb-09	23-Feb-09
E2-5, P330cc	E902070-01	Vapor	23-Feb-09	23-Feb-09
E2-15, P350cc	E902070-02	Vapor	23-Feb-09	23-Feb-09
E4-5, P330cc	E902070-03	Vapor	23-Feb-09	23-Feb-09
E4-15, P350cc	E902070-04	Vapor	23-Feb-09	23-Feb-09
D1-5, P330cc	E902070-05	Vapor	23-Feb-09	23-Feb-09
D1-15, P350cc	E902070-06	Vapor	23-Feb-09	23-Feb-09
D2-5, P330cc	E902070-07	Vapor	23-Feb-09	23-Feb-09
D2-15, P350cc	E902070-08	Vapor	23-Feb-09	23-Feb-09

Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Brigbt	02-Mar-09

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
D3-5, P330cc	E902070-09	Vapor	23-Feb-09	23-Feb-09
D3-15, P350cc	E902070-10	Vapor	23-Feb-09	23-Feb-09
A5-5, P330cc	E902070-11	Vapor	23-Feb-09	23-Feb-09
A5-15, P350cc	E902070-12	Vapor	23-Feb-09	23-Feb-09
A4-15, P350cc	E902070-13	Vapor	23-Feb-09	23-Feb-09
A4-15 Dup, P400cc	E902070-14	Vapor	23-Feb-09	23-Feb-09
A4-5, P330cc	E902070-15	Vapor	23-Feb-09	23-Feb-09
B4-5, P330cc	E902070-16	Vapor	23-Feb-09	23-Feb-09
B4-15, P350cc	E902070-17	Vapor	23-Feb-09	23-Feb-09
C4-5, P330cc	E902073-01	Vapor	24-Feb-09	24-Feb-09
B6-15, P360cc	E902073-02	Vapor	24-Feb-09	24-Feb-09
B6-5, P330cc	E902073-03	Vapor	24-Feb-09	24-Feb-09
B5-15, P360cc	E902073-04	Vapor	24-Feb-09	24-Feb-09
B5-5, P330cc	E902073-05	Vapor	24-Feb-09	24-Feb-09
C3-15, P360cc	E902073-06	Vapor	24-Feb-09	24-Feb-09
C3-5, P330cc	E902073-07	Vapor	24-Feb-09	24-Feb-09
B3-15, P360cc	E902073-08	Vapor	24-Feb-09	24-Feb-09
B3-5, P330cc	E902073-09	Vapor	24-Feb-09	24-Feb-09
C2-15, P360cc	E902073-10	Vapor	24-Feb-09	24-Feb-09
C2-5, P330cc	E902073-11	Vapor	24-Feb-09	24-Feb-09
B2-15, P360cc	E902073-12	Vapor	24-Feb-09	24-Feb-09
B2-5, P330cc	E902073-13	Vapor	24-Feb-09	24-Feb-09
C1-15, P360cc	E902073-14	Vapor	24-Feb-09	24-Feb-09
C1-5, P330cc	E902073-15	Vapor	24-Feb-09	24-Feb-09
B1-15, P360cc	E902073-16	Vapor	24-Feb-09	24-Feb-09
B1-5, P330cc	E902073-17	Vapor	24-Feb-09	24-Feb-09
B1-5 Dup, P380cc	E902073-18	Vapor	24-Feb-09	24-Feb-09

Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
E1-5, 1PV, P110cc (E902069-01) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	0.15	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*100 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*87.6 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*91.9 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*103 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
E1-5, 3PV, P330cc (E902069-02) Vapor	**Sampled: 23-Feb-09**	**Received: 23-Feb-09**							
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	0.16	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*99.0 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*86.6 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*92.1 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.6 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
E1-5, 7PV, P770cc (E902069-03) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	0.14	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*104 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*86.4 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*95.3 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.3 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
E1-15, P360cc (E902069-04) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	0.11	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	6.8	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*106 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*92.1 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*97.8 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*110 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
E3-15, P360cc (E902069-05) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	0.88	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*100 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*89.9 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*97.0 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.6 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
E3-5, P330cc (E902069-06) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*104 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*96.1 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*96.6 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.7 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
E5-15, P360cc (E902069-07) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	0.13	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	0.10	0.10	"	"	"	"	"	"	
Trichloroethene	0.45	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	0.80	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*97.3 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*89.3 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*93.9 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*100 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
E5-5, P330cc (E902069-08) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	0.13	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*112 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*101 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
D6-15, P360cc (E902069-09) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	0.12	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	0.50	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*102 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*90.2 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*92.6 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.6 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
D6-5, P330cc (E902069-10) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	0.14	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*106 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*89.9 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*92.2 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.0 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
D5-15, P360cc (E902069-11) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	0.17	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	0.13	0.10	"	"	"	"	"	"	
Trichloroethene	0.67	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	4.0	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*101 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*94.0 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*93.3 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.8 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
D5-5, P330cc (E902069-12) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	0.15	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*98.3 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*84.7 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*87.4 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.6 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
D4-15, P360cc (E902069-13) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	0.12	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	0.12	0.10	"	"	"	"	"	"	
Trichloroethene	3.1	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	17	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*104 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*87.0 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*91.8 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.0 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
D4-5, P330cc (E902069-14) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	0.36	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*105 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*91.8 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*95.6 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
C6-15, P360cc (E902069-15) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	0.34	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	2.2	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*107 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*91.3 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*94.2 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.9 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/LA	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
C6-5, P330cc (E902069-16) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*99.5 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*88.3 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*87.9 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.0 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
C5-15, P360cc (E902069-17) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	0.49	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	4.1	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*103 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*92.5 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*94.1 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.3 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
C5-5, P330cc (E902069-18) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	0.19	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*102 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*87.2 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*94.7 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.9 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
C4-15, P360cc (E902069-19) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	0.75	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	4.6	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*106 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*88.9 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*92.8 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
C4-15 Dup, P410cc (E902069-20) Vapor	**Sampled: 23-Feb-09**	**Received: 23-Feb-09**							
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92301	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	0.75	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	4.7	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*105 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*88.7 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*94.2 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*108 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
E2-5, P330cc (E902070-01) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92302	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	0.12	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*101 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*98.2 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*102 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
E2-15, P350cc (E902070-02) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92302	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	0.16	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	6.0	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*95.3 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*97.2 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*100 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.4 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
E4-5, P330cc (E902070-03) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92302	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	0.18	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*96.9 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*102 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*103 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
E4-15, P350cc (E902070-04) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92302	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	0.15	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	0.12	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	1.7	0.10	"	"	"	"	"	"	
Tolnene	1.0	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	5.8	0.10	"	"	"	"	"	"	
Ethylbenzene	0.65	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	2.4	0.50	"	"	"	"	"	"	
o-Xylene	0.82	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*94.5 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*98.2 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*110 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.0 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
D1-5, P330cc (E902070-05) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92302	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	0.19	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*107 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*108 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*104 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.0 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
D1-15, P350cc (E902070-06) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92302	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	2.4	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*97.7 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*98.8 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*102 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*100 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
D2-5, P330cc (E902070-07) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92302	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	0.16	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*95.2 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*92.4 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*99.2 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
D2-15, P350cc (E902070-08) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92302	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	0.11	0.10	"	"	"	"	"	"	
Trichloroethene	0.36	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	6.1	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*102 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*87.6 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*99.1 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.7 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
D3-5, P330cc (E902070-09) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92302	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*77.1 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*80.1 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.6 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
D3-15, P350cc (E902070-10) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92302	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	3.7	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	9.9	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*79.2 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*77.8 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*100 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.3 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
A5-5, P330cc (E902070-11) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92302	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*93.3 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*86.6 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.1 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
A5-15, P350cc (E902070-12) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92302	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	2.4	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*104 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*93.4 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*104 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*88.8 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
A4-15, P350cc (E902070-13) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92302	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	0.15	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	2.9	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*93.8 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*86.7 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.2 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
A4-15 Dup, P400cc (E902070-14) Vapor	**Sampled: 23-Feb-09**	**Received: 23-Feb-09**							
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92302	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	0.10	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	2.4	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*93.7 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*87.7 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*101 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.0 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
A4-5, P330cc (E902070-15) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92302	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	0.26	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*97.8 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*89.5 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*106 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.4 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
B4-5, P330cc (E902070-16) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92302	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	0.17	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*100 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*90.6 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*104 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
B4-15, P350cc (E902070-17) Vapor Sampled: 23-Feb-09 Received: 23-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92302	23-Feb-09	23-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	0.16	0.10	"	"	"	"	"	"	
Trichloroethene	0.59	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	9.4	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*99.7 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*95.5 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*93.0 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.1 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
C4-5, P330cc (E902073-01) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92401	24-Feb-09	24-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*96.6 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*82.5 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*90.2 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.3 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
B6-15, P360cc (E902073-02) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92401	24-Feb-09	24-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	0.41	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	5.4	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*102 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*87.9 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*93.7 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.0 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
B6-5, P330cc (E902073-03) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92401	24-Feb-09	24-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*105 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*86.3 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*94.0 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*103 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
B5-15, P360cc (E902073-04) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92401	24-Feb-09	24-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	0.56	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	9.3	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*96.0 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*83.6 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*89.3 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.9 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
B5-5, P330cc (E902073-05) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92401	24-Feb-09	24-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	0.24	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*106 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*89.3 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*93.3 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.7 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
C3-15, P360cc (E902073-06) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92401	24-Feb-09	24-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	2.3	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	16	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*105 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*88.7 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*94.3 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.7 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
C3-5, P330cc (E902073-07) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92401	24-Feb-09	24-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	0.42	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*103 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*93.3 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*94.2 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.8 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
B3-15, P360cc (E902073-08) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92401	24-Feb-09	24-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	0.59	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	14	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*103 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*94.2 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*95.5 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
B3-5, P330cc (E902073-09) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92401	24-Feb-09	24-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	0.34	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*108 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*93.2 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*97.1 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.6 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
C2-15, P360cc (E902073-10) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92401	24-Feb-09	24-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	0.35	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	5.8	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*108 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*94.9 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*98.5 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
C2-5, P330cc (E902073-11) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92401	24-Feb-09	24-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	0.27	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*105 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*92.9 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*94.4 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.8 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
B2-15, P360cc (E902073-12) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92401	24-Feb-09	24-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	0.36	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	12	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*110 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*92.7 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*95.5 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
B2-5, P330cc (E902073-13) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92401	24-Feb-09	24-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	0.11	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	0.47	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*107 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*91.8 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*95.5 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Numher: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
C1-15, P360cc (E902073-14) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92401	24-Feb-09	24-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	0.12	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	7.9	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*109 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*95.4 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*96.5 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
C1-5, P330cc (E902073-15) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92401	24-Feb-09	24-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	0.46	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*102 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*88.7 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*92.4 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.7 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
B1-15, P360cc (E902073-16) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92401	24-Feb-09	24-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	0.15	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	6.6	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*114 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*99.7 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*102 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*118 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
B1-5, P330cc (E902073-17) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92401	24-Feb-09	24-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	0.18	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*103 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*92.1 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*95.5 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
B1-5 Dup, P380cc (E902073-18) Vapor Sampled: 24-Feb-09 Received: 24-Feb-09									
1,1-Difluoroethane (LCC)	ND	10	ug/l	0.05	EB92401	24-Feb-09	24-Feb-09	EPA 8260B	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.10	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.10	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.10	"	"	"	"	"	"	
Benzene	ND	0.10	"	"	"	"	"	"	
Trichloroethene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	0.10	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
m,p-Xylene	ND	0.50	"	"	"	"	"	"	
o-Xylene	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*110 %*		*75-125*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*99.7 %*		*75-125*	"	"	"	"	
Surrogate: Toluene-d8		*99.1 %*		*75-125*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*114 %*		*75-125*	"	"	"	"	

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B - Quality Control

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB92301 - EPA 5030										
Blank (EB92301-BLK1)				Prepared & Analyzed: 23-Feb-09						
1,1-Difluoroethane (LCC)	ND	10	ug/l							
Dichlorodifluoromethane	ND	0.50	"							
Vinyl chloride	ND	0.10	"							
Chloroethane	ND	0.50	"							
Trichlorofluoromethane	ND	0.50	"							
1,1-Dichloroethene	ND	0.50	"							
Methylene chloride	ND	0.50	"							
Freon 113	ND	0.50	"							
trans-1,2-Dichloroethene	ND	0.50	"							
1,1-Dichloroethane	ND	0.50	"							
cis-1,2-Dichloroethene	ND	0.50	"							
Chloroform	ND	0.10	"							
1,1,1-Trichloroethane	ND	0.50	"							
Carbon tetrachloride	ND	0.10	"							
1,2-Dichloroethane	ND	0.10	"							
Benzene	ND	0.10	"							
Trichloroethene	ND	0.10	"							
Toluene	ND	1.0	"							
1,1,2-Trichloroethane	ND	0.50	"							
Tetrachloroethene	ND	0.10	"							
Ethylbenzene	ND	0.50	"							
1,1,1,2-Tetrachloroethane	ND	0.50	"							
m,p-Xylene	ND	0.50	"							
o-Xylene	ND	0.50	"							
1,1,2,2-Tetrachloroethane	ND	0.50	"							
Surrogate: Dibromofluoromethane	*2.59*		"	*2.50*		*104*	*75-125*			
Surrogate: 1,2-Dichloroethane-d4	*2.18*		"	*2.50*		*87.4*	*75-125*			
Surrogate: Toluene-d8	*2.40*		"	*2.50*		*95.8*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*2.55*		"	*2.50*		*102*	*75-125*			

H&P Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B - Quality Control

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB92302 - EPA 5030										
Blank (EB92302-BLK1)				Prepared & Analyzed: 23-Feb-09						
1,1-Difluoroethane (LCC)	ND	10	ug/l							
Dichlorodifluoromethane	ND	0.50	"							
Vinyl chloride	ND	0.10	"							
Chloroethane	ND	0.50	"							
Trichlorofluoromethane	ND	0.50	"							
1,1-Dichloroethene	ND	0.50	"							
Methylene chloride	ND	0.50	"							
Freon 113	ND	0.50	"							
trans-1,2-Dichloroethene	ND	0.50	"							
1,1-Dichloroethane	ND	0.50	"							
cis-1,2-Dichloroethene	ND	0.50	"							
Chloroform	ND	0.10	"							
1,1,1-Trichloroethane	ND	0.50	"							
Carbon tetrachloride	ND	0.10	"							
1,2-Dichloroethane	ND	0.10	"							
Benzene	ND	0.10	"							
Trichloroethene	ND	0.10	"							
Toluene	ND	1.0	"							
1,1,2-Trichloroethane	ND	0.50	"							
Tetrachloroethene	ND	0.10	"							
Ethylbenzene	ND	0.50	"							
1,1,1,2-Tetrachloroethane	ND	0.50	"							
m,p-Xylene	ND	0.50	"							
o-Xylene	ND	0.50	"							
1,1,2,2-Tetrachloroethane	ND	0.50	"							
Surrogate: Dibromofluoromethane	*2.06*		"	*2.50*		*82.4*	*75-125*			
Surrogate: 1,2-Dichloroethane-d4	*2.03*		"	*2.50*		*81.3*	*75-125*			
Surrogate: Toluene-d8	*2.36*		"	*2.50*		*94.3*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*2.45*		"	*2.50*		*97.9*	*75-125*			

Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Volatile Organic Compounds by EPA Method 8260B - Quality Control

H&P Mobile Geochemistry

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB92401 - EPA 5030										
Blank (EB92401-BLK1)				Prepared & Analyzed: 24-Feb-09						
1,1-Difluoroethane (LCC)	ND	10	ug/l							
Dichlorodifluoromethane	ND	0.50	"							
Vinyl chloride	ND	0.10	"							
Chloroethane	ND	0.50	"							
Trichlorofluoromethane	ND	0.50	"							
1,1-Dichloroethene	ND	0.50	"							
Methylene chloride	ND	0.50	"							
Freon 113	ND	0.50	"							
trans-1,2-Dichloroethene	ND	0.50	"							
1,1-Dichloroethane	ND	0.50	"							
cis-1,2-Dichloroethene	ND	0.50	"							
Chloroform	ND	0.10	"							
1,1,1-Trichloroethane	ND	0.50	"							
Carbon tetrachloride	ND	0.10	"							
1,2-Dichloroethane	ND	0.10	"							
Benzene	ND	0.10	"							
Trichloroethene	ND	0.10	"							
Toluene	ND	1.0	"							
1,1,2-Trichloroethane	ND	0.50	"							
Tetrachloroethene	ND	0.10	"							
Ethylbenzene	ND	0.50	"							
1,1,1,2-Tetrachloroethane	ND	0.50	"							
m,p-Xylene	ND	0.50	"							
o-Xylene	ND	0.50	"							
1,1,2,2-Tetrachloroethane	ND	0.50	"							
Surrogate: Dibromofluoromethane	*2.55*		"	*2.50*		*102*	*75-125*			
Surrogate: 1,2-Dichloroethane-d4	*2.20*		"	*2.50*		*87.9*	*75-125*			
Surrogate: Toluene-d8	*2.47*		"	*2.50*		*98.9*	*75-125*			
Surrogate: 4-Bromofluorobenzene	*2.80*		"	*2.50*		*112*	*75-125*			

Mobile Geochemistry Inc.

Environmental Audit	Project: EAU022309-SB1/L4	
1000-A Ortega Way	Project Number: 1576 / 11700 Burke St.	Reported:
Placentia, CA 92670	Project Manager: Mr. Steve Bright	02-Mar-09

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

APPENDIX C

H&Ps Soil Vapor Standard Operating Procedures Fulfilling CA-EPA (DTSC) Soil Gas Advisory, Revision 4, January 2007

MOBILE GEOCHEMISTRY

H&P

Soil Vapor Standard Operating Procedures Fulfilling CA-EPA (DTSC) Soil Gas Advisory

Revision 4

January 2007

Prepared by:

H&P Mobile Geochemistry

Carlsbad, California

Soil Gas Sampling Procedures

Probe Construction and Insertion

Manually-Driven Probes

H&P's manually driven soil vapor probes are constructed of 0.625 inch outside diameter steel and equipped with a hardened steel tip. The probes can reach a depth of 5 feet below ground surface. An inert 1/8 inch nylaflow tube is threaded down the center of the probe and connected to a sampling port just above the tip. This internal sample tubing design eliminates any contact between the sample port and the gas sample.

The probe is driven into the ground by an electric rotary hammer. Once inserted to the desired depth, the probe is rotated approximately 3 turns to open the tip and exposes the vapor sampling ports. This design prevents clogging of the sampling ports and cross-contamination from soils during insertion.

Hydraulically-Driven Probes

H&P's hydraulically-driven soil vapor probes are constructed of either 1.25 or 1.5 inch outside diameter steel and equipped with a hardened drop-off steel tip. The probes are nominally 4 feet long and threaded together to reach multiple depths. The probe is driven into the subsurface with H&P's *STRATAPROBE*™ direct-push system. Once inserted to the desired depth, the probe is retracted slightly to expose the vapor sampling port. A small diameter inert tubing is then inserted through the center of the rod and threaded into a gas tight fitting just above the tip. After a sample is obtained the tubing is removed and the probe rod advanced to the next sampling depth or removed. This design prevents clogging of the sampling port and cross-contamination from soils during insertion.

Surface Seals

The probe rod is sealed at the surface with granular and hydrated bentonite for a minimum of 20 minutes before sampling.

Soil Gas Sampling

Soil vapor is withdrawn from the end of the inert nylaflow tubing that runs from the sampling tip to the surface using a 20 to 60 cubic centimeter (cc) syringe or gas tight canister (Summa) connected via an on-off valve (see diagram). The probe tip and sampling tubing is nominally purged of three to five internal dead volumes, or based upon a pre-determined purge volume established by a purge volume test described below. A sample of in-situ soil vapor is then withdrawn and immediately transferred to the mobile lab for analysis within minutes of collection. The use of small calibrated syringes allowed for careful monitoring of purge and sample volumes. This procedure ensures adequate sample flow is obtained without excessive pumping of air or introduction of surface air into the sample.

For off-site analysis, samples are collected in canisters or in tedlar bags when allowed. Samples collected in tedlar bags for VOC analysis are either analyzed on the same day or transferred to a canister.

Purge Volume Test

If required, a site specific purge volume test is conducted at the beginning of the soil gas survey to purge ambient air from the sampling system. Three different volumes are sampled (nominally 1, 3, 7 purge volumes) and analyzed immediately to determine the volume amount with the highest concentration. Therefore, the optimum purge volume is achieved and used during the entire site investigation.

Use of Tracer Compound to Ensure Probe Seal Integrity

A tracer compound, typically difluoroethane, iso-propanol, or butane, is used to test for leaks around the probe barrel at the ground surface and in the sampling system. The tracer is placed around the base of the probe barrel and at the top of the probe barrel during sample collection. If the tracer is detected per CA-EPA advisory specifications, another sample is collected.

Sample Flow Rate

Sample collection is timed so that the flow rate does not exceed 200 ml/per minute. This is accomplished by withdrawing the plunger on the 60 cc syringe at a constant rate for 20 seconds. The collector notes the collection time on a logsheet, and also records any resistance to sample flow that is felt on the syringe during collection.

Summa Canister

Summa canisters are connected to the end of the nylaflow tubing to the same three way valve used with the syringe. A choke is placed on the canister to ensure that the flow rate is no more than 200 ml/ per minute into the summa canister.

Field Records

The field technician maintains a logsheet summarizing:

- Sample identification
- Probe location
- Date and time of sample collection
- Sampling depth
- Identity of samplers
- Weather conditions
- Sampling methods and devices
- Soil gas purge volumes
- Volume of soil gas extracted
- Observation of soil or subsurface characteristics (any condition that affects sample integrity)
- Apparent moisture content (dry, moist or saturated etc.) of the sampling zone
- Chain of custody protocols and records used to track samples from sampling point to analysis.

Analytical Methodology

The following analytical protocols fulfills the both the CA-EPA advisory (2003) and LA-RWQCB soil gas analytical guidelines (1997).

Operating Conditions and Instrumentation

Volatile Organic Compounds (VOCs) by EPA 8260

Instrument: Hewlett-Packard 6890(6850)/5973 or 5890/5972 GCMS
Column: 25 meter HP-624, 0.20mm x 1.0u. capillary.
Carrier flow: Helium at 1.0 ml/min.
Detectors: Quadrupole MS, full scan mode
Concentrator: Tekmar 3000/Solatek 72

Volatile Organic Compounds (VOCs) by EPA TO-14 or TO-15

Instrument: Hewlett-Packard 6850/5973
Column: 60 meter HP-624, 0.32mm x 1.8u. capillary.
Carrier flow: Helium at 3.0 ml/min.
Detectors: Quadrupole MS, full scan mode
TO-14 Instrumentation: Entech 7100 Air Concentrator/Entech 7300 Autosampler

Fixed and Biogenic Gases (O2, CO2, & Methane)

Instrument: SRI 8610 or Carle AGC 311 Gas Chromatograph
Column: 6 foot CTR
Carrier flow: Helium at 15 ml/min.
Detectors: Thermoconductivity (TCD) for O2 & CO2.

Detectors: Flame ionization detector (FID) for methane.

Hydrogen Sulfide

Instrument: Jerome 631x
Detectors: Gold-film

Standard Preparation

Primary (stock) standards: Made from certified neat components or from traceable standards purchased from certified suppliers.

Secondary (working) Standards: Made by diluting primary standard. Typical concentrations are 1ug/ml, 10 ug/ml, and 50 ug/ml.

Laboratory Check Samples are prepared at the midpoint concentration from a standard purchased from a source different than the primary standards.

Lot numbers and preparations of all standards are recorded on a log sheet and kept in the mobile laboratory.

Gas Standards for TO-14A/15 analysis purchased from Spectra Gases, Branchburg, N.J. diluted from 1.0 ppmv to 10ppbv (for targets) and 1.0ppmv to 100ppbv (internal standards and surrogates

Initial Multi-Point Calibration Curve

An initial calibration curve of a minimum of 3 points is performed either:

- At the start of the project.
- When the GC column or operating conditions have changed
- When the daily mid-point calibration check cannot meet the requirements as specified below.
- For TO-15 a five point calibration is used.

Calibration curves for each target component are prepared by analyzing low, mid, and high calibration standards covering the expected concentration range. The lowest standard concentration will not exceed 5 times the reporting limit for each compound.

A linearity check of the calibration curve for each compound is performed by computing a correlation coefficient and an average response factor. If a correlation coefficient of 0.990 or a percent relative standard deviation (%RSD) of $\pm$ 15% is obtained, an average response factor is used over the entire calibration range. If the linearity criteria are not obtained, quantitation for that analyte is performed using a calibration curve.

After each initial multi-point calibration, the validity of the curve is further verified with a laboratory control standards (LCS) prepared at the mid-point of the calibration range. The LCS includes all target compounds and the response factor (RF) must fall within $\pm$ 20% of the factor from the initial calibration curve.

Continuing Calibration (Daily Mid-point Calibration Check)

Continuing calibration standards prepared from a traceable source are analyzed at the beginning of each day. Acceptable continuing calibration agreement is set at $\pm$ 20% to the average response factor from the calibration curve, except for freon, chloroethane, and vinyl chloride when a 25% agreement is required. When calibration checks fall outside this acceptable range for analytes detected on the site, corrective action, consisting of verification of the standard and/or a new calibration curve for the analytes out of specifications is performed by the on-site chemist.

The continuing calibration includes all compounds expected or detected at the site in addition to any specific compounds designated in the project workplan.

Detection Limits

Reporting limits for this program are defined as 5 times lower than the lowest concentration standard of the calibration curve, as follows:

Compound	Detector	Report Limit
VOCs by TO-14A/15	Mass Spec	1.0 to 5 ppbv
VOCs	Mass Spec	0.1 to 1 ug/l-vapor
Methane	FID	10 ppmv
Fixed Gases	TCD	0.1% by vol
H2S	Gold Film	0.10 ppmv

Injection of Soil Gas Samples

Vapor samples are withdrawn from the probe sampling syringe with a 5 cc syringe and injected with surrogates into a purge & trap instrument for VOC analysis. Separate aliquots are directly injected into gas chromatographs for fixed gases and methane analysis. The injection syringe is flushed 2 times with the sample prior to injection. Injection syringes are flushed several times with clean air or discarded between injections.

TO-14A/15 samples are taken into Summa or similar passivated canisters. Holding time for these canisters is 30 days.

Laboratory Data Logs

The field chemist maintains injection and sample analysis records including date and time of analysis, sampler's name, chemist's name, sample ID number, concentrations of compounds detected, calibration data, and any unusual conditions.

Quality Control Procedures

Compliance With Standards

Sampling and analytical procedures complied with the American Society for Testing and Materials' *Standard Guide for Soil Gas Monitoring in the Vadose Zone* (ASTM D5314-93), the LA-RWQCB Soil Gas Guidelines (Feb 1997 version), and the San Diego County SAM Soil Gas Guidelines (October, 2001).

Sampling Quality Control

Method Blanks

Prior to sampling each day, all components of the sampling system are checked for contamination by drawing ambient air from above ground through the sampling equipment, and injecting a sample into a gas chromatograph. The analysis results are compared to that of the ambient air and recorded in the data tables as blanks.

Sample Quality Control

Each sample is given a unique identification number specifying location and depth. Purge and sample volumes are monitored closely using small calibrated syringes to assure a proper flow of soil gas. This ensures a representative sample is obtained from the sample zone without excessive pumping, which could result in sampling of surface air.

Decontamination Procedures

To minimize the potential for cross-contamination between sites, all external soil vapor probe parts are wiped or washed cleaned of excess dirt and moisture with solvents or de-ionized water as appropriate. The probe's internal nylaflow tubing is purged with clean air between sampling locations or replaced as necessary. Sampling syringes are flushed with clean air after each use or replaced.

Corrective Action

Corrective action is taken when unexpected contaminant levels are detected. First duplicate samples are taken to verify the initial detection of petroleum hydrocarbons. If contamination is suspected, then the sample probes are disassembled, wiped cleaned of excess dirt and moisture, rinsed with deionized water, washed with Alconox and water, and rinsed again with

deionized water. The sample tubing in the probe is replaced. Contaminated sampling syringes are discarded.

Analytical Quality Control

Method Blanks

Method blanks are performed at the start of each day by drawing clean air through the sampling equipment and analyzing. These blanks verify all components of the sampling and analytical system are free of contamination. Additional blanks are performed more often as appropriate depending upon the measured concentrations, at a minimum 1 every 20 samples. The results of all blank analyses are recorded in the data tables. If a blank shows a measurable amount of any target compound, the on-site chemist will investigate and determine the source, and resolve the contamination problem prior to analyzing any samples.

Duplicate Samples

Duplicate (repetitive) analysis of a sample is performed when inconsistent data are observed, but at least one every 20 samples. Because soil vapor duplicates can vary widely, nominal relative percent difference (RPD) acceptance criteria is $\pm$ a factor of 2.

Continuing Calibration (Daily Mid-point Calibration Check)

As described on page 5 of this document, continuing calibration standards prepared from a traceable source are analyzed at the beginning of each day.

The continuing calibration includes all compounds expected or detected at the site and any specific compounds designated in the project workplan.

Laboratory Check Samples (LCS)

Laboratory check samples, prepared at the lowpoint concentration from a standard purchased from a source different than the calibration standards, are analyzed at the end of each day if all samples are below detection. Acceptance criteria is $\pm$ 20% from the true value. If the LCS falls outside this acceptance range for analytes detected on site, corrective action, consisting of verification of the standard and/or a new calibration curve for the analytes out of specifications, is performed.

APPENDIX D

95% UCL Arsenic (Soil) and PCE (Soil Gas) Calculations

General UCL Statistics for Data Sets with Non-Detects

User Selected Options

From File	N:\1576\As\1576As.wst
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

As in soil (mg/kg), 11630-11700 Burke Street, Santa Fe Springs, CA 90670 (ARSENIC)

General Statistics

Number of Valid Samples	39	Number of Detected Data	19
Number of Unique Samples	18	Number of Non-Detect Data	20
		Percent Non-Detects	51.28%

Raw Statistics		Log-transformed Statistics	
Minimum Detected	0.87	Minimum Detected	-0.139
Maximum Detected	55	Maximum Detected	4.007
Mean of Detected	16.73	Mean of Detected	2.094
SD of Detected	19	SD of Detected	1.282
Minimum Non-Detect	0.3	Minimum Non-Detect	-1.204
Maximum Non-Detect	5	Maximum Non-Detect	1.609

Note: Data have multiple DLs - Use of KM Method is recommended
For all methods (except KM, DL/2, and ROS Methods),
Observations < Largest ND are treated as NDs

Number treated as Non-Detect	30
Number treated as Detected	9
Single DL Non-Detect Percentage	76.92%

UCL Statistics

Normal Distribution Test with Detected Values Only		Lognormal Distribution Test with Detected Values Only	
Shapiro Wilk Test Statistic	0.754	Shapiro Wilk Test Statistic	0.889
5% Shapiro Wilk Critical Value	0.901	5% Shapiro Wilk Critical Value	0.901
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		*DL/2 Substitution Method*	
Mean	8.846	Mean	0.867
SD	15.24	SD	1.774
95% DL/2 (t) UCL	12.96	95% H-Stat (DL/2) UCL	18.84
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE yields a negative mean		Mean in Log Scale	0.764
		SD in Log Scale	1.755
		Mean in Original Scale	8.666
		SD in Original Scale	15.33
		95% Percentile Bootstrap UCL	12.94
		95% BCA Bootstrap UCL	13.95

Gamma Distribution Test with Detected Values Only		Data Distribution Test with Detected Values Only
k star (bias corrected)	0.724	Data do not follow a Discernable Distribution (0.05)
Theta Star	23.1	
nu star	27.52	

A-D Test Statistic	1.391
5% A-D Critical Value	0.776
K-S Test Statistic	0.776
5% K-S Critical Value	0.206
Data not Gamma Distributed at 5% Significance Level	

Assuming Gamma Distribution

Gamma ROS Statistics using Extrapolated Data	
Minimum	0.87
Maximum	55
Mean	16.65
Median	16.04
SD	13.1
k star	1.459
Theta star	11.42
Nu star	113.8
AppChi2	90.14
95% Gamma Approximate UCL	21.02
95% Adjusted Gamma UCL	21.21

Note: DL/2 is not a recommended method.

Nonparametric Statistics

Kaplan-Meier (KM) Method	
Mean	8.915
SD	15.01
SE of Mean	2.475
95% KM (t) UCL	13.09
95% KM (z) UCL	12.99
95% KM (jackknife) UCL	12.84
95% KM (bootstrap t) UCL	14.42
95% KM (BCA) UCL	13.52
95% KM (Percentile Bootstrap) UCL	13.37
95% KM (Chebyshev) UCL	19.7
97.5% KM (Chebyshev) UCL	24.37
99% KM (Chebyshev) UCL	33.54

Potential UCLs to Use

95% KM (BCA) UCL	13.52

General UCL Statistics for Full Data Sets

User Selected Options

From File	N:\1576\SG-Risk\PCE95UCL.wst
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

PCE in soil gas (ug/l), 11630-11700 Burke Street, Santa Fe Springs, CA 90670 (Perchloroethylene)

General Statistics

Number of Valid Samples	28	Number of Unique Samples	25

Raw Statistics

Minimum	0.24
Maximum	17
Mean	6.076
Median	5.6
SD	4.532
Coefficient of Variation	0.746
Skewness	0.942

Log-transformed Statistics

Minimum of Log Data	-1.427
Maximum of Log Data	2.833
Mean of log Data	1.43
SD of log Data	1.038

Relevant UCL Statistics

Normal Distribution Test

Shapiro Wilk Test Statistic	0.915
Shapiro Wilk Critical Value	0.924

Data not Normal at 5% Significance Level

Lognormal Distribution Test

Shapiro Wilk Test Statistic	0.909
Shapiro Wilk Critical Value	0.924

Data not Lognormal at 5% Significance Level

Assuming Normal Distribution

95% Student's-t UCL	7.534

95% UCLs (Adjusted for Skewness)

95% Adjusted-CLT UCL	7.647
95% Modified-t UCL	7.56

Assuming Lognormal Distribution

95% H-UCL	11.84
95% Chebyshev (MVUE) UCL	13.84
97.5% Chebyshev (MVUE) UCL	16.81
99% Chebyshev (MVUE) UCL	22.65

Gamma Distribution Test

k star (bias corrected)	1.346
Theta Star	4.513
nu star	75.39
Approximate Chi Square Value (.05)	56.39
Adjusted Level of Significance	0.0404
Adjusted Chi Square Value	55.37
Anderson-Darling Test Statistic	0.301
Anderson-Darling 5% Critical Value	0.763
Kolmogorov-Smirnov Test Statistic	0.103
Kolmogorov-Smirnov 5% Critical Value	0.168

Data appear Gamma Distributed at 5% Significance Level

Data Distribution

Data appear Gamma Distributed at 5% Significance Level

Assuming Gamma Distribution

95% Approximate Gamma UCL	8.123
95% Adjusted Gamma UCL	8.272

Nonparametric Statistics

95% CLT UCL	7.484
95% Jackknife UCL	7.534
95% Standard Bootstrap UCL	7.444
95% Bootstrap-t UCL	7.701
95% Hall's Bootstrap UCL	7.637
95% Percentile Bootstrap UCL	7.539
95% BCA Bootstrap UCL	7.616
95% Chebyshev(Mean, Sd) UCL	9.809
97.5% Chebyshev(Mean, Sd) UCL	11.42
99% Chebyshev(Mean, Sd) UCL	14.6

Potential UCL to Use	Use 95% Approximate Gamma UCL	8.123

APPENDIX E

DTSC SG-Screen Model Data

SOIL GAS DATA FROM 5 FEET

DATA ENTRY SHEET

SG-SCREEN
?A Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576B@5'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
71432	2.60E+02			Benzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
2.9E-06	7.7E-03

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
?A Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576B@5'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
71432	2.60E+02			Benzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

5' RI

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.7E-06	4.6E-03

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576T@5'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	5.70E+01			Toluene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, $\rho_b{}^A$ (g/cm^3)	ENTER Vadose zone soil total porosity, n^v (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w{}^v$ (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.7E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576T@5'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	5.70E+01			Toluene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	9.9E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576EB@5'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
100414	1.50E+01			Ethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	154.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.3E-08	1.2E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
?A Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576EB@5'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
100414	1.50E+01			Ethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	154.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
7.6E-09	7.1E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576X@5'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95476	7.70E+01			o-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^v (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^v (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	6.8E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576X@5'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95476	7.70E+01			o-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	4.0E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576TMB135@5'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108678	5.80E+00			1,3,5-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, *carcinogen* (unitless)	Hazard quotient from vapor intrusion to indoor air, *noncarcinogen* (unitless)
NA	6.7E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576TMB135@5'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108678	5.80E+00			1,3,5-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	4.0E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576TMB@5'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95636	1.70E+01			1,2,4-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.0E-03

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
?A Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576TMB@5'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95636	1.70E+01			1,2,4-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.2E-03

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576AC@5'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
67641	3.20E+02			Acetone

MORE

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	125.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.1E-03

MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

DATA ENTRY SHEET

SG-SCREEN
SA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576AC@5'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
67641	3.20E+02			Acetone

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	125.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	6.6E-04

MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

DATA ENTRY SHEET

SG-SCREEN
?A Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576CDS@5'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
75150	3.60E+01			Carbon disulfide

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, $\rho_b{}^A$ (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w{}^V$ (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	5.0E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
?A Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576CDS@5'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
75150	3.60E+01			Carbon disulfide

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, $\rho_b{}^A$ (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w{}^V$ (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.0E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
?A Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576MEK@5'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
78933	2.30E+01			Methylethylketone (2-butanone)

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^v (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^v (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.9E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576MEK@5'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
78933	2.30E+01			Methylethylketone (2-butanone)

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, $\rho_b{}^A$ (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w{}^V$ (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.3E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576CB@5'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108907	9.00E+00			Chlorobenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	7.0E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576CB@5'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_a ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108907	9.00E+00			Chlorobenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	4.2E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576TCE@5'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
79016	1.60E+01			Trichloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from *vapor* intrusion to indoor air, carcinogen (unitless)	Hazard quotient *from vapor* intrusion to indoor air, noncarcinogen (unitless)
1.1E-08	2.2E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
?A Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576TCE@5'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
79016	1.60E+01			Trichloroethylene

MORE

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
6.7E-09	1.3E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
?A Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576PCE@5'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	4.70E+02			Tetrachloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
9.2E-07	1.0E-02

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576PCE@5'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	4.70E+02			Tetrachloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
5.5E-07	6.2E-03

MESSAGE SUMMARY BELOW:

END

SOIL GAS DATA FROM 15 FEET

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576B@15'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
71432	1.60E+02			Benzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
7.4E-07	2.0E-03

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576B@15'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
71432	1.60E+02			Benzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
4.4E-07	1.2E-03

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
?A Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576T@15'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	1.00E+03			Toluene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, $\rho_b{}^A$ (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w{}^V$ (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.2E-03

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576T@15'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	1.00E+03			Toluene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	7.3E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576EB@15'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
100414	6.50E+02			Ethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, *or* user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
2.3E-07	2.1E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576EB@15'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
100414	6.50E+02			Ethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER *User-defined* vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor *flow rate into bldg.* (Leave blank to calculate) Q_{soil} (*L/m*)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.3E-07	1.3E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576X@15'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95476	3.22E+03			o-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.2E-02

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576X@15'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95476	3.22E+03			o-Xylene

MORE

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, $\rho_b{}^A$ (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w{}^V$ (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	7.0E-03

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
?A Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576TMB@15'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95636	9.40E+00			1,2,4-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	4.2E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576TMB@15'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95636	9.40E+00			1,2,4-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.5E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576TCFM@15'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_p ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
75694	1.10E+01			Trichlorofluoromethane

MORE

ENTER *Depth* below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor *permeability*)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE

ENTER Vandose zone SCS soil type (Lookup Soil *Parameters*)	ENTER Vadose zone *soil dry* bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone *soil total* porosity, n^V (unitless)	ENTER Vadose zone *soil water-filled* porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure *duration*, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	5.8E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
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Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576TCFM@15'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
75694	1.10E+01			Trichlorofluoromethane

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.4E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
?A Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576AC@15'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
67641	5.50E+02			Acetone

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^v (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^v (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	7.8E-04

MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

DATA ENTRY SHEET

SG-SCREEN
?A Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576AC@15'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
67641	5.50E+02			Acetone

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	4.6E-04

MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576CDS@15'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
75150	1.00E+00			Carbon disulfide

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^v (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^v (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	6.1E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576CDS@15'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
75150	1.00E+00			Carbon disulfide

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER *Soil gas* sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER *Vadose zone* SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, *or* user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.6E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
?A Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576MEK@15'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
78933	9.10E+00			Methylethylketone (2-butanone)

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	6.3E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576MEK@15'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
78933	9.10E+00			Methylethylketone (2-butanone)

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^v (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^v (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.8E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
?A Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576DCA@15'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
75343	5.80E+00			1,1-Dichloroethane

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, $\rho_b{}^A$ (g/cm^3)	ENTER Vadose zone soil total porosity, n^v (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w{}^v$ (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.3E-09	3.7E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
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DTSC
Vapor Intrusion Guidance
Interim Final 12/04
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1576DCA@15'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
75343	5.80E+00			1,1-Dichloroethane

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone *soil dry* bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone *soil total* porosity, n^v (unitless)	ENTER Vadose zone *soil water-filled* porosity, θ_w^v (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER *Exposure* frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
7.6E-10	2.2E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
?A Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576DCE@15'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
75354	5.90E+00			1,1-Dichloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.2E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
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Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576DCE@15'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
75354	5.90E+00			1,1-Dichloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^v (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^v (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.9E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576CF@15'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
67663	1.50E+02			Chloroform

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.5E-07	2.1E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
?A Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576CF@15'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
67663	1.50E+02			Chloroform

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
8.6E-08	1.3E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576CT@15'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
56235	1.70E+02			Carbon tetrachloride

MORE

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^v (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^v (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.0E-06	1.4E-03

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576CT@15'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
56235	1.70E+02			Carbon tetrachloride

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
6.1E-07	8.5E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576TCE@15'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
79016	3.70E+03			Trichloroethylene

MORE

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE

Lookup Soil Parameters

ENTER Vandose zone SCS soil type	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.1E-06	2.1E-03

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576TCE@15'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
79016	3.70E+03			Trichloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^v (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^v (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
6.4E-07	1.2E-03

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
PA Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576PCE@15'-R

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	1.70E+04			Tetrachloroethylene

MORE

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.3E-05	1.5E-01

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
?A Version 2.0; 04/

Reset to Defaults

DTSC
Vapor Intrusion Guidance
Interim Final 12/04
(last modified 1/21/05)

1576PCE@15'-I

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	1.70E+04			Tetrachloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	457	24			

Enter correct SCS soil type, or user-defined permeability.

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, $\rho_b{}^A$ (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, $\theta_w{}^V$ (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	25	250

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
8.0E-06	9.0E-02

MESSAGE SUMMARY BELOW:

END